TEXAS DEPARTMENT OF WATER RESO' CES

90068469

HAZARDOUS WASTE COMPLIANCE MONITORING AND ENFORCEMENT

INDUSTRY NAME: TEXAS EASTMAN CO. PHONE: (214) 236-5000

SITE ADDRESS: 2 MILES S.E. OF LONGVIEW ZIP: 75607 COUNTY: HARRISON

X-Ref SA Vol I

TDWR PERMIT OR REGIS. NO. 30137 (2-6) EPA ID NO. TXD007330202 (8-19)

HW 50043-000

INDUSTRY NAME TXEASTMN (21-28) DISTRICT 05 (30-31) DATE REPORT SUBMITTED M.O/F Y 0884 (33-36)

TYPE OF FACILITY GFT GF (38-40) MAJOR/NONMAJOR M (42) TYPE OF EVALUATION EV (44-45)

DATE OF EVALUATION OR ENFORCEMENT REFERRAL 07-17-84 (47-54)

SUPERFUND FILE

JUN 12 1992

REORGANIZED

Types Of Violations	Deg.	Date Of Notif. Letter	Date Of Inf. Enf. Act.	Date Response Due	Date Of Actual Compliance	Resolved/ Unresolved
GWM (56-58)	(59)	(61-68)	(70-77)	(106-113)	(115-122)	(124)
INC						
CLO						
FIN	1	08-21-84		09-04-84		U
PTB						
MAN						
SCH						
OTH	3				07-30-84	R

COMMENTS:

*01 242 (1-3, 5-9)

(11-13, 15-19, 21-23, 25-29, 31-33, 35-39, 41-43, 45-49, 51-53, 55-59, 61-63, 65-69, 71-73, 75-79, 81-83, 85-89, 91-93)

NUMBER OF SAMPLES: 0

WORK NO.: 9091

SUBMITTED BY: Laurence M. Davis

CONTENTS

Facility Name TEXAS EASTMAN CO. Reg. # 30137/HW 50043-000

- ✓ 1. CM&E Code Sheet 0814
- ✓ 2. Contents Sheet (if included)
- ✓ 3. Major Group I Checklist or Non Major Checklist
- ✓ 4. *Facility Checklists
  - 2 A. Landfills
  - 6 B. Surface Impoundments
  - ___ C. Land Treatment
  - 1 D. Tanks
  - ___ E. Chemical, Physical, Biological Treatment
  - ___ F. Waste Piles
  - ~~1~~ G. Incinerators
  - ___ H. Thermal Treatment
- ✓ 5. Closure and Post-Closure Compliance Review Checklist
- ✓ 6. Ground Water Monitoring Program Checklist
- ✓ 7. Financial Assurance, Closure and Post Closure Worksheet
- ✓ 8. Major Facilities Status Sheet (Not Required for Non Majors)
- ___ 9. Generator/Facility/Transporter (GFT) Status (Not Required for Majors)

* If a Required Checklist is Omitted, Explain Below:

INCINERATORS - NOT YET OPERATIONAL; TRIAL BURNS ANTICIPATED IN OCT-NOV, '84.

MAJOR

TEXAS DEPARTMENT OF WATER RESOURCES
Industrial Solid Waste Disposal Compliance Monitoring Inspection

Inspection Cover Sheet (see reverse side for checklist use and general instructions)

Compliant _____ Texas Permit/Reg. No. HW50043-000

Noncompliant X EPA I.D. No. TXD 007330202

Site Operator Information:

Name of Company TEXAS EASTMAN COMPANY

Company's Address P.O. BOX 7444

LONGVIEW, TEXAS Phone No. 214/236-5000

Site Address KODAK BLVD., East OFF S.H. 149, 2 MILES SOUTHEAST OF LONGVIEW Phone No. 214/236-5000 County HARRISON

Type of Industry ORGANIC CHEMICALS MANUF. - SIC 2869 & 2821

Indicate below Classes of Waste managed (Hazardous-H, Class I nonhazardous-NH, Class II-III)

Generator H, NH, II, III Transporter H Small Quantity Generator _____

Treatment H, NH, II Disposal H, NH, II, III Storage H, NH, II, III ; 90 Day Exemption _____

Site Information (T.S.D. facilities only)

1. Are facilities located outside the 100 year flood plain area? NO
2. Describe land use within one mile INDUSTRIAL, AGRICULTURAL, SOME RESIDENCES
3. Closed or abandoned facilities PRE-RCRA ONLY, SEE 9-20-83 REPORT FOR PRIOR CLOSURES

Inspection Information:

1. Inspector's Name & Title TERRENCE M. DAVIS, EQS
2. Inspection Date JULY 16-17, 1984
3. Inspection Participants Dael Baughman, Stancy Simpson, Tom McAninch, & Mike Choffin - Texas Eastman; Ann McGinley - TDWR, Central Office

Approved: Billy H Boggs
District Supervisor

Signed: Terrence M. Davis
Inspector

Date: August 20, 1984

Revised 12/1/82 - FFY 1983

COMPLIANCE MONITORING INSPECTION REPORT
Generators Checklist

Section A - Hazardous Waste Determination 335.6(e) and 335.62

1. A determination has been made that the solid waste(s) generated is either hazardous or non-hazardous. Yes ✓ No ___

2. If the answer to #1 is yes, check the method used for determination:

   a. Listed as a hazardous waste in Title 40 CFR Part 261, Subpart D ✓.

   b. Process or materials knowledge ✓.

   c. Tested for characteristics as identified in Title 40 CFR Part 261, Subpart C ✓. (If equivalent test method used, attach a copy)

3. The following wastes, if generated, have been tested to determine nonhazardous characteristics:

   a. Class I nonhazardous — Yes ✓ No ___ N/A ___

   b. Class II — Yes ___ No ___ N/A ✓

   c. PCB (storage) — Yes ✓ No ___ N/A ___

   If no, list on the comments sheet those wastes deemed nonhazardous or processes from which non-hazardous waste was produced.

4. Notification of waste stream changes are current. Yes ✓ No ___ N/A ___

Section B - Special Conditions 335.75

1. If a generator has received from or transported to a foreign source any hazardous waste, the appropriate notice has been filed with the Regional Administrator (EPA requirement only). Yes ___ No ✓ N/A ___

2. Waste was manifested and signed by foreign consignee. Yes ___ No ___ N/A ✓

3. Confirmation of waste transported out of the country has been received by the generator. Yes ___ No ___ N/A ✓

tion C - Record Kee, and Reports 335.9 and 335.7C

1. Generator maintains the required records and reports for 3 years. Yes ✓ No ___

   ✓ At the facility

   ___ Elsewhere (note location in comments sheet)

2. Disposal methods described in the registration agree with actual situation [335.6(b)]. Yes ✓ No ___
   Permit identifies incinerator disposal, not interim facilities
3. Spills or unauthorized discharges are reported as required (335.453). Yes ✓ No ___ N/A ✓

DO NOT COMPLETE SECTION D IF GENERATOR DISPOSES OF HAZARDOUS AND/OR NONHAZARDOUS WASTE ON-SITE ONLY.

Section D - Pretransport and Manifest Requirements 335.65-.69

(According to STANCY SIMPSON Name, ~~Owner/Operator, Manager~~ RCRA COORDINATOR)

1. Identify primary off-site disposal facility(s). Use comments sheet or add registration waste list properly annotated. see comments
2. TDWR manifest shipping control ticket is properly completed. Yes ✓ No ___ N/A ___
3. Generator receives return (white) copy of shipping control ticket. Yes ✓ No ___ N/A ___
4. Generator is familiar with DOT packaging requirements identified in Title 49 CFR Parts 173, 178 and 179. BOX 15A - SOLID IGNITABLE FROM TYLER STORAGE TERMINAL (REG. # 33707) Yes ✓ No ___
5. Containers used to temporarily store waste before transport meet the DOT packaging requirements of Title 49 CFR Parts 173, 178 and 179. Yes ___ No ___ N/A ✓
6. Generator labels and marks each package in accordance with Title 49 CFR Part 172. Yes ✓ No ___
7. Each container of 110 gallons or less is marked with the required hazardous waste warning label. Yes ✓ No ___ N/A ___
8. If hazardous wastes are accumulated for more than 90 days, the generator (~~is~~/will be) a permitted storage facility. Yes ✓ No ___ N/A ___
9. Generator inspects containers for leakage or corrosion at least weekly (335.245). Yes ✓ No ___
10. If leaking or bulging container is found, operator transfers waste into a usable container properly lined not to react with the waste. Yes ✓ No ___ N/A ___

11. Generator locates containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line (335.246). Yes ✓ No ___ N/A ___

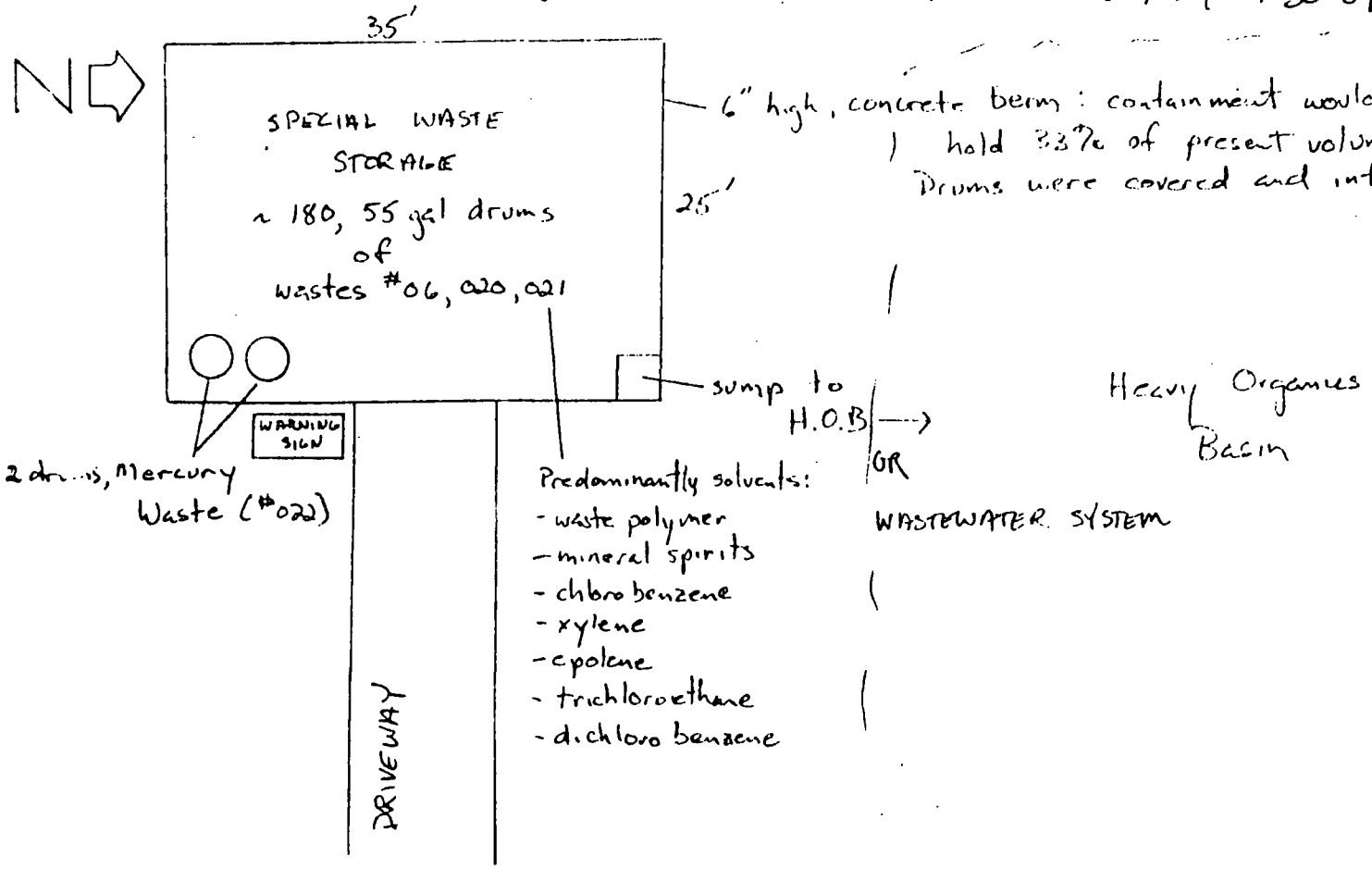
12. Containers holding incompatible wastes are kept apart by physical barrier or sufficient distance (335.118). Yes ___ No ___ N/A ✓

NOTE: If tanks are used, complete checklist for tanks.

13. Storage area has containment protection as set forth in Title 40 CFR Part 264.175, Use and Management of Containers. Yes ✓ No[1] ___

NOTE 1: This will be a future permit requirement.

14. Describe drum or container storage area. Use photos and/or comments sheet. ALL WASTES PLANNED TO BE DISPOSED BY INCINERATION FY 85. NO DRUMMED PCB WASTES CURRENTLY ON-SITE. ALL DRUMS OBSERVED DURING THE INSPECTION WERE REMOVED TO THE INCINERATOR SITE AND EMPTIED INTO THE PERMITTED STORAGE TANKS, EXCEPT MERCURY WASTES (PITONE COMM. W/STANCY SIMPSON) BY 7-30-84.



Checklist GENERATORS
(Attach to correct checklist)

Date 7-16, 17-84

Reg./Permit No. 30137/HW50043-000

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: D 335.65-.69 Paragraph: 1

LIQUID PCB's (031) are shipped to Rollins Environmental Services, Deer Park. PCB-contaminated material (032) is disposed of at Chemical Waste Management, Arkansas. High-boiling organics (034) will be shipped one more time to Arkansas Eastman, Batesville, after which disposal will be on-site by incineration. Eastman's Tyler, TX, raw material

SECTION: Paragraph:

storage terminal (Reg # 33707) sends filter wastes (IH, 973340) to Longview for disposal in the Special Wastes Landfill; these will be incinerated next FY.

SECTION: Paragraph:

CO[illegible]IANCE MONITORING INSPECTION RE[illegible]RT
Facilities Checklist
TAC 335.111-.118

Section A - General Facility Standards

1. Proof of deed recordation of on-site disposal facilities has been provided to the agency. Yes ✓ No ___ N/A ___

2. A sketch of facilities, general site orientation showing landfills, surface impoundments, injection wells, drainage routes, water bodies/courses and other pertinent features (separate sketch or diagram of landfill(s) etc.) should be attached to this and other facility checklist(s). ATTACHED

NOTE: For all nonhazardous, noncommercial facilities do not complete the remainder of this Facilities Checklist. Proceed to specific type facility checklists and complete one checklist for each disposal facility or multi-comments on a single checklist.

Section B - Waste Analysis 335.114

1. Facility has a waste analysis plan. FOR EACH FACILITY Yes ✓ No ___

2. Waste plan is maintained at the facility. Yes ✓ No ___

3. Waste plan includes the following:

   a. Parameters for which each waste will be analyzed. Yes ✓ No ___

   b. Test methods used to test for these parameters. Yes ✓ No ___

   c. Sampling method used to obtain sample. Yes ✓ No ___

   d. Frequency with which the initial analysis will be reviewed or repeated. Yes ✓ No ___

      NOTE: Frequency includes requirement to repeat whenever waste stream or process(es) is changed.

   *e. Waste analyses that generators have agreed to supply. Yes ___ No ___ N/A ✓

   *f. Procedures which are used to inspect and analyze each movement of hazardous waste including:

      (1) Procedures to be used to determine the identity of each movement of waste. Yes ___ No ___ N/A ✓

      (2) Sampling method to be used to obtain representative sample of the waste to be identified. Yes ___ No ___ N/A ✓

*Note: Applies to off-site commercial facilities only

4. The facility provides adequate security (335.115) Yes ✓ No ___

a. ✓ 24-hour surveillance system (e.g. television monitoring or guards).

~~OR~~

b. ✓ Artificial or natural barrier around facility (e.g. fence or fence and cliff).

Describe SABINE RIVER - SOUTH BOUNDARY

OTHER PROPERTY LINES ARE

FENCED

c. ✓ Means to control entry through entrances (e.g. attendant, television monitors, locked entrance, controlled roadway access).

Describe ___

5. Facility has a sign with the legend "Danger - Unauthorized Personnel Keep Out". Yes ✓ No ___ N/A ___

Section C - General Inspection Requirements 335.116

1. Facility has a written inspection schedule (and plan). Yes ✓ No ___

✓ Plan is maintained at the facility
___ Elsewhere (note location in comments sheet)

2. Inspection schedule (plan) provides for inspecting the following:

a. Monitoring equipment. Yes ✓ No ___

b. Safety and emergency equipment. Yes ✓ No ___

c. Security devices. Yes ✓ No ___

d. Operating and structural equipment. Yes ✓ No ___

3. Schedule or plan identifies the types of problems to be looked for during inspection:

a. Malfunctions and deterioration. Yes ✓ No ___

b. Operator error. Yes ✓ No ___

c. Discharge or threat of discharge. Yes ✓ No ___

4. The owner/operator maintains an inspection log which includes:

a. Date and time of inspection. Yes ✓ No ___

b. Name of inspector. Yes ✓ No ___

c. Notation of observations. Yes ✓ No ___

d. Date and nature of repairs or remedial action. Yes ✓ No ___

5. Malfunctions or other deficiencies noted in the inspection log have been rectified. Yes ✓ No ___ N/A ___

6. Inspection log records are maintained for 3 years. Yes ✓ No ___

Section D - Personnel Training 335.117

1. Owner/operator maintains Personnel Training Records at the facility. Yes ✓ No ___

2. Personnel Training Records include:

a. Job Title and written job description of each position. Yes ✓ No ___

b. Description of type and amount of training. Yes ✓ No ___

c. Records of training given to facility personnel. Yes ✓ No ___

3. Personnel Training Records are maintained for the appropriate length of time. Yes ✓ No ___

Section E - Requirements for Ignitable, Reactive or Incompatible Waste 335.118

1. Owner/operator is familiar with proper separation and safeguards needed to prevent ignition or reaction of ignitable or reactive waste. Yes ✓ No ___

a. Use comments sheet to describe separation and confinement procedures.

b. Use comments sheet to describe any potential sources of ignition or reaction.

2. Smoking and open flame are confined to specifically designated locations. Yes ✓ No ___

3. "No Smoking" signs are posted in hazardous areas. Yes ✓ No ___

Section F - Preparedness and Prevention 335.131-.137

1. Describe any evidence of fire, explosion, or contamination of the environment in the comments sheet.

2. Facility is equipped with:

   a. Internal communication or alarm system within easy access. Yes ✓ No ___ N/A ___

   b. Telephone or two-way radio to call emergency response personnel. Yes ✓ No ___ N/A ___

   c. Portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment tested regularly to assure proper operation. Yes ✓ No ___ N/A ___

   d. Water volume adequate for hoses, sprinklers or water spray system. Yes ✓ No ___ N/A ___

3. Aisle space is sufficient to allow unobstructed movement of personnel and equipment. Yes ✓ No ___ N/A ___

4. Owner/operator has attempted to make arrangements with the local response authorities to familiarize them with the layout of the facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, and possible evacuation routes. Yes ✓ No ___ N/A ___

5. In the case that more than one police and fire department might respond, a primary authority has been designated. Yes ✓ No ___ N/A ___

6. Owner/operator has attempted to make agreements with State emergency response teams, emergency response contractors and equipment suppliers. Yes ✓ No ___ N/A ___

7. Owner/operator has attempted to make arrangements with local hospitals to familiarize them with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility. Yes ✓ No ___ N/A ___

8. State or local authorities have entered into the necessary arrangements. Yes ✓ No ___ N/A ___

Section G - Contingency Plan and Emergency Procedures 33 1-.157

1. A contingency plan is maintained at the facility. Yes ✓ No ___

2. Contingency plan is: a. a revised SPCC Plan ___
   b. a separate document ✓
   c. adequate to meet emergency procedures requirements Yes ✓ No ___

3. Emergency coordinator is on-site or on call at all times. Yes ✓ No ___

Section H - Manifest System, Recordkeeping and Reporting 335.171-.177

1. Owner/operator complies with manifest requirements. Yes ✓ No ___ N/A ___

   NOTE: If 1 is N/A, go to question 6 below.

2. Waste received from a rail or water (bulk shipment) transporter are accompanied by a properly executed shipping paper. Yes ___ No ___ N/A ✓

3. All shipments of waste received have been consistent with the manifest. Yes ✓ No ___

4. Unmanifested waste was reported to the Executive Director [335.15(b)]. Yes ___ No ___ N/A ✓

5. Discrepancies have been reconciled with the generator and transporter. Yes ___ No ___ N/A ✓

6. Owner/operator keeps a written operating record at the facility. Yes ✓ No ___

7. Operating record reflects the following:

   a. Description, quantity of each hazardous waste received and method(s) and date of T.S.D. at the facility. Yes ✓ No ___

   b. Location and quantity of each hazardous waste within the facility (for disposal facilities, quantity on a map or diagram of each cell or disposal area, for all facilities cross-reference to shipping ticket Nos.). Yes ✓ No ___

   c. Records and results of waste analyses and trial tests. Yes ✓ No ___

   d. Summary Reports of all incidents that require implementing the contingency plan. Yes ✓ No ___ NOT IMPLEMENTED SINCE LAST INSPECTION

   e. Closure cost estimates for all facilities (335.232). Yes ✓ No ___

   f. Post closure cost estimates for disposal facilities (335.233). Yes ✓ No ___ N/A ___

8. Owner/operator maintains an adequate closure plan for all facilities. Yes ✓ No ___ N/A ___

9. Owner/operator maintains an adequate post closure plan for disposal facilities. Yes ✓ No ___ N/A ___

10. If the owner/operator is required to furnish financial assurance (owner/operator of a hazardous waste treatment, storage or disposal facility),

What is the estimated closure cost?

$5,164,000 plus $5,500,000 for the HEAVY ORGANICS BASIN (HOB)

What is the estimated post closure cost?

$715,000

11. Closure (and post closure) costs are adjusted for inflation on an annual basis. Yes ✓ No ___

12. Owner/operator established financial assurance for "current" closure (and post closure) cost(s) with TDWR by July 6, 1982. Yes ✓ No ___ except for the HOB, see attached District letter

a. If no, but financial assurance was established at a later date, specify when:

b. Specify the method(s) of assurance of financial responsibility for these costs:

FINANCIAL TEST

13. The closure and post closure costs appear to adequately meet the estimates for the most expensive point in a facilities operating life (see also page 27 of the Group II checklist.). Yes ✓ No ___

Liability Coverage Requirements
40 CFR 265.147

1. Facility owner/operator had sudden accidental coverage (1 million per occurrence with annual aggregate of 2 million) demonstrated by July 15, 1982. Yes ✓ No ___ N/A ___

a. If no, but sudden coverage was established at a later date, specify when:

b. Specify the method(s) of liability coverage

__ Liability insurance _____ .
(amount)

✓ Financial test $1 MILLION / $2 MILLION
(amount)

__ Combination _____ .
(amount)

Coverage for Non-Sudden Accidental Occurrence

1. Date by which coverage must be demonstrated (check one).

a. ✓ Jan. 16, 1983 (sales or revenues totaling $10 million or more)

*b. _____ Jan. 16, 1984 (sales or revenues greater than $5 million but less than $10 million)

*c. _____ Jan. 16, 1985 (all other owners or operators)

*NOTE: If coverage for non-sudden accidental occurrence is not in place, a letter of intent must be sent to the Executive Director by January 16, 1983 stating the date the owner or operator plans to have the necessary coverage.

2. A letter of intent to the Executive Director has been sent stating the date the owner or operator plans to have coverage. Yes__ No__ N/A✓

3. Facility owner has demonstrated financial responsibility for bodily and property damage to third parties caused by non-sudden accidental occurences by the required date (3 million per occurrence; 6 million annual aggregate). Yes✓ No__ N/A__

4. Specify method of liability coverage:

___ Liability insurance _____ .
(Amount)

✓ Financial test $3 MILLION / $6 MILLION
(Amount)

___ Combination _____ .
(Amount)

Checklist FACILITIES
(attach to correct checklist)

Date 7-16,17-84

Reg./Permit No. 30137/HW 50043-000

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: F 335.131-.137 Paragraph: 1

Contaminated stormwater & evidence of overtopping of a By-Product recovery storage tank (site #32 - Facilities sketch, drum-out area) was observed within the earthen containment structure. Eastman has only one vacuum truck of their own; others are contracted. Records indicate that removal of contained spills and contaminated rainfall takes 4-5 days.

SECTION: Paragraph:

Other uses of vacuum trucks have priority. It was suggested that removal of contained wastes from earthen structures be expedited as much as possible.

SECTION: Paragraph:

(attach to correct checklist)

Date 8-4,5-83

Reg./Permit No. 30137

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: D-335.65-.69 Paragraph: 1

Off-site disposal of liquid PCB's will be at Rollins Environmental Services in Deer Park; first shipment will occur this fall. Transformers and mercury wastes are sent to Chemical Waste Management in Alabama; last shipment was in Dec. '80. Waste #034, high boiling organics (C_{9}^{+}), 117490, are being accumulated in three, 20,000 gal. capacity, railroad tank cars; this material will be incinerated at Arkansas Eastman, in Batesville, Arkansas until the

SECTION: Paragraph:

Longview plant's incinerator is permitted and on-line. The Longview facility will be accepting filter wastes (IH, 973340) from their Tyler, TX, storage terminal (registration # 33707) for disposal in their "special wastes" landfill.

SECTION: D-335.65-.69 Paragraph: 12 335.118

This section was checked in considering drummed wastes - #06, 020, 021, 022, & PCB's. Except for PCB's, these wastes are not incompatible and are located in the "special wastes" storage area (p.3, Group I). PCB's are properly drummed and placed in enclosed, storage warehouse 39-I. No signs of spillage were noted at other location. Except for 022 (mercury) and PCB's, the above wastes will be incinerated when on-line.

(attach to correct checklist)

8-4,5-83

Reg / Permit No. 30137

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: D - 335.65 - .69 Paragraph: 14

PCB-contaminated materials are packed in covered drums. The storage area in warehouse 39-I is encompassed by a 6" high concrete berm. Seventy barrels were counted; stacked 3 high. Barrels are marked with appropriate labels, dated, & weighed. Warning signs are posted in clear view. As previously noted, shipment is pending this fall.

SECTION: _____ Paragraph: _____

SECTION: _____ Paragraph: _____

INDUSTRIAL SOLID WAS[illegible]

Compliance Monitoring Inspection Report
Landfills Checklist (Rule 335.341-.348) Class of Waste (IH)

SPECIAL WASTE LANDFILL
FACILITY #04

				***
1.	Is run-on diverted from the landfill? (Effective November 19, 1981)		Yes ✓	No
2.	Is run-off from the landfill collected? (Effective November 19, 1981)		Yes ✓	No
	a. Is this waste analyzed to determine if it is a hazardous waste?	N/A ✓	Yes	No
	(1) If it is a hazardous waste, how is it managed? (Use narrative explanations sheet)	see comments		
	(2) Is the collected run-off discharged through a point source to surface waters?		Yes	No ✓
	(a) If Yes, list WQ Permit Number _____			
**3.	Is the landfill managed so that wind dispersal is controlled? (Note: blowing debris)		Yes ✓	No
4.	Do records indicate that reactive or ignitable wastes are placed in the landfill?		Yes ✓	No
	a. If Yes, is it treated, rendered or mixed before or immediately after placement in the landfill so it is no longer reactive or ignitable?	N/A	Yes ✓	No
	b. Describe treatment, etc., or attach a copy of treatment.	mixed with soil		
5.	Do records indicate that incompatible wastes are placed in separate landfills?	N/A ✓	Yes	No
6.	Do records indicate that bulk or non-containerized liquid wastes or wastes containing free liquids are placed in the landfill? (Effective November 19, 1981)		Yes	No ✓
	a. If Yes, is the liquid waste treated chemically or physically, so no free liquids are present?	N/A	Yes	No
7.	Do records indicate that containers holding liquid wastes are placed in the landfill?		Yes	No ✓
	a. If Yes, is the container designed to hold liquids for a use other than storage? (e.g. battery, capacitor) (Effective November 19, 1981)		Yes	No

TDWR-
Page 1 of 30 of Group II
*(Changed 9/10/82, added *** note and response columns realigned)
**Note checklist questions to be noted or completed during on-site inspection
***No in this response column indicates noncompliance; yes indicates use of questionable management practice(s).

***

8. Do the landfills have the following:

   a. A liner? Yes___ No ✓

   b. If Yes, what type? _____.

   c. For each landfill indicate active or inactive status active, one closed cell to date.

   d. A leachate collection and removal system? Yes___ No ✓

      (1) If Yes, has leachate generation been detected? Yes___ No___

      (2) If Yes, provide volumes and dates that leachate has been removed _____.

      (3) How is leachate disposed? _____.

9. Do records indicate that empty containers are placed in the landfill? Yes___ No ✓

   a. If Yes, are they reduced in volume (e.g. shredded, crushed)? (Effective November 19, 1981) Yes___ No___

**10. Is there evidence of site instability? (e.g. erosion, settling)? No ✓ Yes___

**11. Is there evidence of ponding of water on-site? No ✓ Yes___

**12. Is there any indication of improper or inadequate drainage? No ✓ Yes___

13. Are monitor wells required for this site? (Refer to Rule 335.191-.195 - Ground Water Monitoring) Yes ✓ No___

   a. If Yes, has owner/operator installed, operated and maintained a ground water monitoring system (unless waived) prior to 11/19/81? Waived _____ (Date) Yes ✓ No___

14. Describe landfill(s) site and indicate sketch location(s) and designation(s). Also describe waste streams disposed in each landfill: see Facilities Sketch (item 27) attached to Facilities Checklist. Disposal of waste nos. 006, 015, 016, 017, 018. One cell, 31,000 yds^3.

Note 1: Attach Ground Water Monitoring Report if answer to Question 13 is yes. Please refer to TABLES 5 & 6 OF VRM's Ground-water quality Assessment Report submitted 4-24-84. 1st Quarter Sampling since report was performed 7-9,10-84.

Checklist LANDFILLS
(Attach to correct checklist)

Date 7-16,17-84

Reg./Permit No. 30137/HW50043-000

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: SPECIAL WASTES LANDFILL Paragraph: 2.a.(1)

solid material is mixed with soil, compacted, then backfilled. Traffic manager & internal manifest system tracks wastes & designates appropriate disposal facility. Access to the landfill area is controlled and signs are posted to identify the SPECIAL WASTE VS SANITARY CELLS. Accumulated stormwater is pumped to Basin #7 of the wastewater

SECTION: _____ Paragraph: _____

treatment system. Eastman expects to close the landfill in FY85 since the incinerator is expected to handle the landfill's waste streams.

SECTION: _____ Paragraph: _____

INDUSTRIAL SOLID WAS

Compliance Monitoring Inspection Report
Landfills Checklist (Rule 335.341-.348) Class of Waste (II)

SANITARY LANDFILL
FACILITY # 08

				***
1.	Is run-on diverted from the landfill? (Effective November 19, 1981)		Yes ✓	No
2.	Is run-off from the landfill collected? (Effective November 19, 1981)		Yes ✓	No
	a. Is this waste analyzed to determine if it is a hazardous waste?	N/A ✓	Yes	No
	(1) If it is a hazardous waste, how is it managed? (Use narrative explanations sheet)			
	(2) Is the collected run-off discharged through a point source to surface waters?		Yes	No
	(a) If Yes, list WQ Permit Number _____			
**3.	Is the landfill managed so that wind dispersal is controlled? (Note: blowing debris)		Yes ✓	No
4.	Do records indicate that reactive or ignitable wastes are placed in the landfill?		Yes	No ✓
	a. If Yes, is it treated, rendered or mixed before or immediately after placement in the landfill so it is no longer reactive or ignitable?	N/A	Yes	No
	b. Describe treatment, etc., or attach a copy of treatment.			
5.	Do records indicate that incompatible wastes are placed in separate landfills?	N/A ✓	Yes	No
6.	Do records indicate that bulk or non-containerized liquid wastes or wastes containing free liquids are placed in the landfill? (Effective November 19, 1981)		Yes	No ✓
	a. If Yes, is the liquid waste treated chemically or physically, so no free liquids are present?	N/A ✓	Yes	No
7.	Do records indicate that containers holding liquid wastes are placed in the landfill?		Yes	No ✓
	a. If Yes, is the container designed to hold liquids for a use other than storage? (e.g. battery, capacitor) (Effective November 19, 1981)		Yes	No

TDWR-
Page 1 of 30 of Group II
*(Changed 9/10/82, added *** note and response columns realigned)
**Note checklist questions to be noted or completed during on-site inspection
***No in this response column indicates noncompliance; yes indicates use of questionable management practice(s).

***

8. Do the landfills have the following:

   a. A liner? Yes___ No ✓

   b. If Yes, what type? _____

   _____.

   c. For each landfill indicate active or inactive status active, currently closing the old cell and constructing a new one to the northwest of the cell under closure

   d. A leachate collection and removal system? Yes___ No ✓

      (1) If Yes, has leachate generation been detected? Yes___ No___

      (2) If Yes, provide volumes and dates that leachate has been removed

      _____

      _____.

      (3) How is leachate disposed? _____

      _____.

9. Do records indicate that empty containers are placed in the landfill? Yes ✓ No___

   a. If Yes, are they reduced in volume (e.g. shredded, crushed)? (Effective November 19, 1981) Yes ✓ No___

**10. Is there evidence of site instability? (e.g. erosion, settling)? No ✓ Yes___

**11. Is there evidence of ponding of water on-site? No ✓ Yes___

**12. Is there any indication of improper or inadequate drainage? No ✓ Yes___

13. Are monitor wells required for this site? (Refer to Rule 335.191-.195 - Ground Water Monitoring) Yes___ No ✓

   a. If Yes, has owner/operator installed, operated and maintained a ground water monitoring system (unless waived) prior to 11/19/81? Waived _____ (Date) Yes___ No___

14. Describe landfill(s) site and indicate sketch location(s) and designation(s). Also describe waste streams disposed in each landfill: see item 26 on FACILITIES SKETCH. RECIEVES WASTE NOS. 023-027

    _____.

Note 1: Attach Ground Water Monitoring Report if answer to Question 13 is yes.

*(Changed 9/10/82, added *** note and columns realigned)
**See Note on Page 1

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report
Surface Impoundments Checklist (TAC 335.281-.288) Class of Waste (II

TALLEY 1A - FLY ASH POND
FACILITY # 15

***

1. Are surface impoundments presently used to treat or store waste? Yes ✓ No ___

   a. If yes, inspect the impoundments.

**2. Does the impoundment appear to maintain at least 2 feet (60 cm) of freeboard? Yes ✓ No ___

**3. Check for evidence of overtopping of the dike. Is the facility compliant? Yes ✓ No ___

**4. Check for evidence of seepage. Is the facility compliant? Yes ✓ No SEE COM

5. Containment system for dyked or dammed impoundments (335.283)

   **a. Does the earthen dike have a protective cover (e.g. grass, shale, rock) to minimize wind and water erosion? Yes ✓ No ___

6. What wastes are treated or stored in the impoundment? WASTE NO. 029, FLY ASH

7. Are waste analyses and trial tests conducted on these wastes (chemical processing of a different hazardous waste or method only)? N/A ___ Yes ✓ No ___

   a. If not, does the owner/operator have written documented information on similar treatment of similar wastes? Yes ___ No ___

8. Is this information retained in the operating record? N/A ___ Yes ✓ No ___

9. Is the impoundment inspected daily to check freeboard level? Yes ✓ No ___

10. Is the impoundment, dikes and vegetation surrounding the dike inspected weekly to detect leaks, deterioration or failures? Yes ✓ No ___

*(Changed 9/10/82, response format realigned, other minor changes)
**See Note on Page 1
***This response column indicates noncompliance.

***

11. Does the impoundment have a liner? Yes ✓ No ✓

a. If Yes, what type? a bentonite, slurry trench was constructed for the west & south levees in 1975, other levees and the bottom of the TAILEY AGE unlined.

b. If Yes, does it have a leachate collection and removal system? Yes ___ No ✓

**12. Is there evidence of ignitable or reactive wastes placed in the impoundment? Yes ___ No ✓

a. If Yes, explain in comments sheet [review 335.118(a)];
or

b. If Yes, is the impoundment used solely for emergencies? Yes ___ No ___

**13. Is there evidence of incompatible wastes placed in the impoundment [if yes, review 335.118(b)]? Yes ___ No ___

14. Are monitor wells required for this site? (~~Refer to Rule 335.191-.195~~ - Ground Water Monitoring) Yes ✓ No under Water Quality Permit # WQ-0471

a. Has owner/operator installed, operated and maintained a ground water monitoring system (unless waived) prior to 11/19/81? Yes ✓ No ___

NOTE 1: Attach Ground Water Monitoring Report if answer to question 14 is yes. SEMI-ANNUALLY, APRIL '84 RESULTS Attached

15. Describe impoundment(s) site and indicate plat map, location(s) and designation(s). Also describe each impoundment's dimensions and capacity (acre-feet): See item 20, Facility SKETCH. 28.4 acres, 6.9×10^5 yds³ or 142.6 acre-feet

NOTE 2: If the answer is No for Nos. 5a, 7a, 8, 9, 10 and No. 14 after 11/19/81, explain in comments sheet.

*(Changed 9/10/82, response formal realigned)
**See Note on Page 1
***See Note Page 3

Groundwater Data

Texas Eastman Company

1st Quarter, 1984

WELL NUM	AQUIFER	RES STAT	FACILITY	DATE	WTR LEVEL	PH	TOC	TOX	SP COND	CHLORIDE	IRON	MANGANESE	SULFATE	SODIUM	PHENOLS	CALCIUM	MAGNESIUM	POTASSIUM	BICARB ALK	NITRATE
3-S	SHAL	RCRA	LAGOON	840411	229.35	3.5	9	[illegible]	[illegible]	50	[illegible]	1.2	155	190	0.022	64	50	[illegible]	[illegible]	<3.0
5-S	SHAL	RCRA	LAGOON	840411	232.92	6.4	[illegible]	0.50	4500	440	[illegible]	4.5	2150	800	0.020	160	85	13	60	<3.0
9-S	SHAL	RCRA	LAGOON	840411	243.00	7.4	115	1.05	[illegible]	508	5.5	4.9	[illegible]	980	0.056	55	15	[illegible]	140	<3.0
14-S	SHAL	RCRA	BACKGROUND	840411	272.19	7.4	5	0.02	[illegible]	16	0.2	[illegible]	127	29	0.744	110	21	4.2	220	<0.3
18-S	SHAL	RCRA	HOS	840411	276.47	7.7	7	1.90	550	30	1.5	[illegible]	101	65	0.270	90	22	19	300	<3.0
19-S	SHAL	RCRA	HOS	840411	270.87	10.7	110	[illegible]	[illegible]	25	1	<0.1	50	30	<0.004	41	[illegible]	[illegible]	60	<3.0
20-S	SHAL	RCRA	HOS	840411	269.15	5.4	4000	0.05	3500	177	650	[illegible]	54	250	0.900	470	34	[illegible]	200	<3.0
24-s[1]	shal	rcra	landfill	840411	250.82	7.8	250	0.50	1400	[illegible]	9.7	[illegible]	[illegible]	595	<0.004	30	[illegible]	-	340	<3.0
25-S	SHAL	RCRA	LANDFILL	840411	256.70	7.4	[illegible]	1.44	750	[illegible]	4.2	2.5	[illegible]	14	<0.004	80	16	[illegible]	[illegible]	3.1
26-S	SHAL	RCRA	LANDFILL	840411	271.9	6.0	175	1.59	450	34	50	0.5	[illegible]	23	<0.004	14	15	[illegible]	[illegible]	<3.0
27-S	SHAL	RCRA	LANDFILL	840411	260.4	7.5	10	2.79	510	62	4.9	1	112	110	<0.004	25	20	3.5	120	<3.0
28-S	SHAL	RCRA	LANDFILL	840411	252.03	6.9	8	0.36	300	13	10	<.3	42	20	<0.004	10	11	[illegible]	40	<3.0
29-s	SHAL	RCRA	LANDFILL	840411	251.8	6.7	13	2.18	700	25	15	0.3	37	11	0.004	15	9	[illegible]	40	<3.0
MW-2	SHAL	TDWR	FA#1	840411	280.53	6.3	19		350											
MW-4	SHAL	TDWR	FA#2	840411	275.94	7.0	7		500											
W-4	SHAL	TDWR	TALLEY 1	840411	225.0	4.8	4150		5500											
W-7	SHAL	TDWR	TALLEY 1	840411	243.0	5.3	250		4050											
W-10	SHAL	TDWR	TALLEY 1	840411	243.58	5.5	435		3900											
17-S	SHAL	TDWR	CR04 BASIN	840411	280.83	4.8	21		2050											

All parameters expressed as ppm except pH and specific conductivity

[1]Groundwater Quality Assessment Plan indicates 24-S monitors nonhazardous landfill

Checklist SURFACE IMPOUNDMENT
(Attach to correct checklist)

Date 7-16, 17-84

Reg./Permit No. 30137/HW-50047-000

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: TALLEY 1A Paragraph: 4

SEEPAGE FROM TALLEY 1A'S WEST LEVEE WAS OBSERVED BY URM DURING THE GROUND-WATER QUALITY ASSESSMENT (SEE REPORT SUBMITTED 4-24-84). HIGH CONCENTRATIONS OF CHLORINATED HYDROCARBONS WERE FOUND IN THE SABINE RIVER RELATIVE TO UPSTREAM STATIONS DURING URM'S STUDY. EVEN THOUGH THE BOTTOM OF TALLEY 1A IS UNLINED, SEEPAGE ON THE RIVER SIDE IS CONSIDERED TO BE

SECTION: Paragraph:

UNRELATED TO FLY ASH DISPOSAL ACTIVITIES. CURRENTLY, EASTMAN IS EXPLORING A GROUND WATER RECOVERY SYSTEM FOR THE NORTHWEST CORNER OF TALLEY 2A.

SECTION: Paragraph:

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report
Surface Impoundments Checklist (TAC 335.281-.288)

Class of Waste (I)

HEAVY ORGANICS BASIN

***

1. Are surface impoundments presently used to treat or store waste? Yes ✓ No ___

   a. If yes, inspect the impoundments.

**2. Does the impoundment appear to maintain at least 2 feet (60 cm) of freeboard? Yes ✓ No ___

**3. Check for evidence of overtopping of the dike. Is the facility compliant? Yes ✓ No ___

**4. Check for evidence of seepage. Is the facility compliant? Yes ___ No ✓ see attached distribution plan

5. Containment system for dyked or dammed impoundments (335.283)

   **a. Does the earthen dike have a protective cover (e.g. grass, shale, rock) to minimize wind and water erosion? Yes ✓ No ___

6. What wastes are treated or stored in the impoundment? waste nos. 02 → 09; reclaims liquid layer to By-Product Recovery System.

7. Are waste analyses and trial tests conducted on these wastes (chemical processing of a different hazardous waste or method only)? N/A ___ Yes ✓ No ___

   a. If not, does the owner/operator have written documented information on similar treatment of similar wastes? Yes ___ No ___

8. Is this information retained in the operating record? N/A ___ Yes ✓ No ___

9. Is the impoundment inspected daily to check freeboard level? Yes ✓ No ___

10. Is the impoundment, dikes and vegetation surrounding the dike inspected weekly to detect leaks, deterioration or failures? Yes ✓ No ___

*(Changed 9/10/82, response format realigned, other minor changes)
**See Note on Page 1
***This response column indicates noncompliance.

***

11. Does the impoundment have a liner? Yes___ No ✓

a. If Yes, what type? _____

_____.

b. If Yes, does it have a leachate collection and removal system? Yes___ No ✓

**12. Is there evidence of ignitable or reactive wastes placed in the impoundment? Yes ✓ No___

a. If Yes, explain in comments sheet [review 335.118(a)]; see attached Eastman description of HOB waste's ultimate character and inspection comment.

or

b. If Yes, is the impoundment used solely for emergencies? Yes___ No ✓

**13. Is there evidence of incompatible wastes placed in the impoundment [if yes, review 335.118(b)]? Yes___ No ✓

14. Are monitor wells required for this site? (Refer to Rule 335.191-.195 - Ground Water Monitoring) Yes ✓ No___

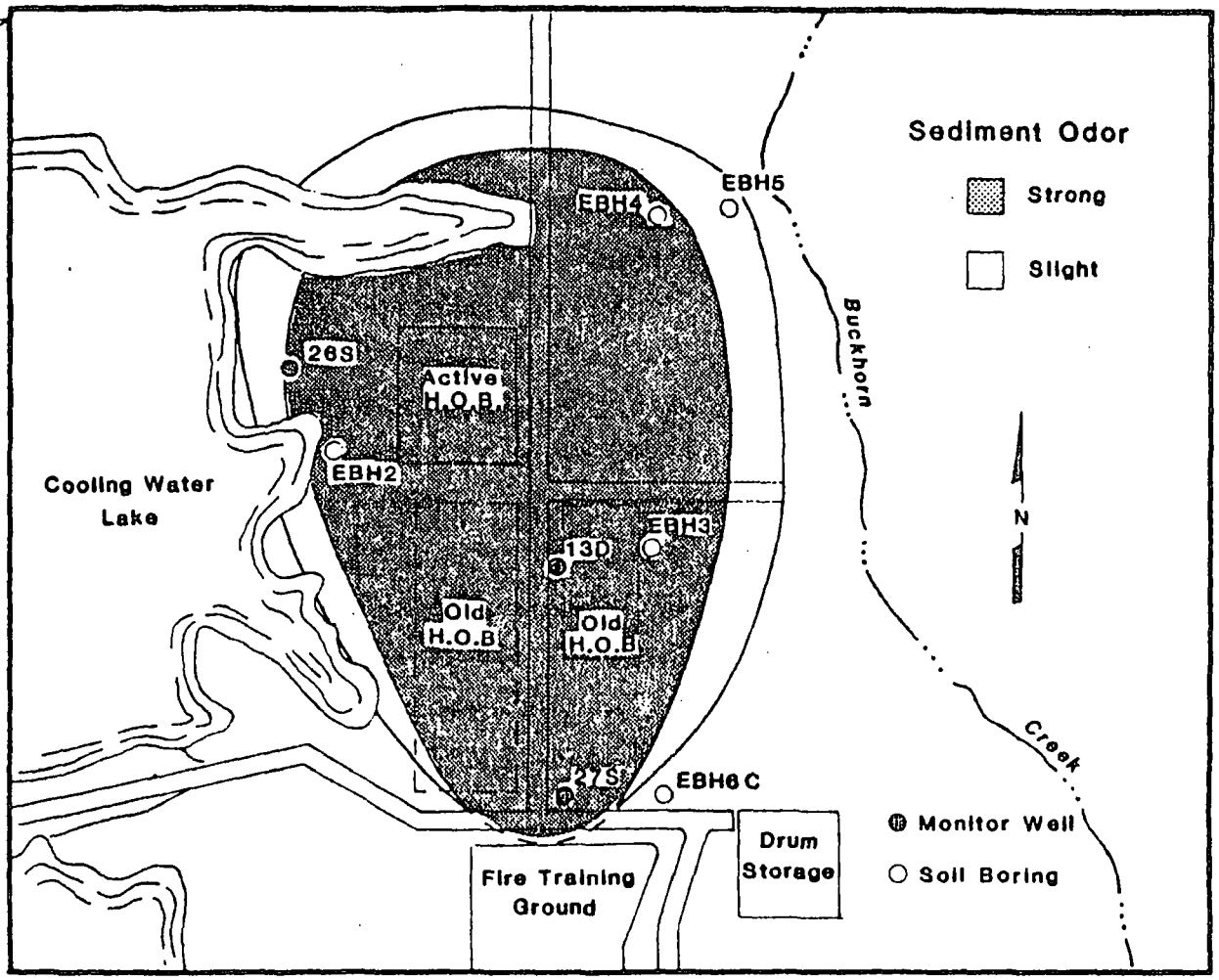
a. Has owner/operator installed, operated and maintained a ground water monitoring system (unless waived) prior to 11/19/81? Yes ✓ No___

NOTE 1: Attach Ground Water Monitoring Report if answer to question 14 is yes. LAST SAMPLING 7-9,10-84. Please refer to VRM report (4-24-84) and Tables 5 & 6

15. Describe impoundment(s) site and indicate plat map, location(s) and designation(s). Also describe each impoundment's dimensions and capacity (acre-feet): see item 23, FACILITY SKETCH; 1.8 surface-acres by ~10' depth = 18 acre-feet. Anticipated schedule of closure - FY 85 → FY 91.

NOTE 2: If the answer is No for Nos. 5a, 7a, 8, 9, 10 and No. 14 after 11/19/81, explain in comments sheet.

*(Changed 9/10/82, response formal realigned)
**See Note on Page 1
***See Note Page 3



26S & 27S installed in 1983
13D installed during this study (1984)
26S shows contamination
27S does not show conclusively, contamination
13D is screened from 117' to 127'; not suspected to be contamination, however more data is needed.

Figure 2. Pattern of Waste Distribution in the Vicinity of the Heavy Organics Basin. Depth Intervals of Strong Odors Indicated on Boring and Well Logs in Appendix A.

Interim Status

Closure and Post-Closure Plans for the

Heavy Organic Basin

These closure and post-closure plans have been developed pursuant to the requirements of TAC 335.211 through 335.220 and 335.286. Only hazardous wastes with the characteristic of ignitability are placed into the HOB. As required in TAC 335.287, ignitable wastes can be placed into a surface impoundment only if the waste is processed, rendered, or mixed immediately after placement in the surface impoundment so that the resulting waste mixture no longer meets the definition of ignitable waste under 40 CFR 261.21.

As stated in TAC 335.286(b), if a demonstration can be made that none of the material in the impoundment is hazardous waste, then the impoundment is not subject to the requirements of Subchapter K, including closure plans.

Texas Eastman Company has extensively sampled the material in the HOB and determined that it does not meet the characteristic hazardous wastes or contain a listed waste. At closure, Texas Eastman will extensively test the material in the HOB to confirm that it is nonhazardous at the time of closure.

Attached is our closure plan for the HOB under the general provisions of 335.6(f). This plan will be followed during closure. However, the costs involved in this closure are not included in our closure costs for hazardous waste facilities.

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report
Surface Impoundments Checklist (TAC 335.281-.288)

CHROMATE SETTLING BASIN
FACILITY #13

Class of Waste *** II (INH)

1.	Are surface impoundments presently used to treat or store waste?	Yes ✓	No
	a. If yes, inspect the impoundments.		
**2.	Does the impoundment appear to maintain at least 2 feet (60 cm) of freeboard?	Yes ✓	No
**3.	Check for evidence of overtopping of the dike. Is the facility compliant?	Yes ✓	No
**4.	Check for evidence of seepage. Is the facility compliant?	Yes ✓	No SEE ALSO GROUNDWATER MONITORING RESULTS
5.	Containment system for dyked or dammed impoundments (335.283)		
**a.	Does the earthen dike have a protective cover (e.g. grass, shale, rock) to minimize wind and water erosion?	Yes ✓	No

6. What wastes are treated or stored in the impoundment? waste no. 033, cooling tower blowdown (INH); and, 025, chromate sludge (II) generated.

7.	Are waste analyses and trial tests conducted on these wastes (chemical processing of a different hazardous waste or method only)?	N/A	Yes ✓	No
	a. If not, does the owner/operator have written documented information on similar treatment of similar wastes?		Yes	No
8.	Is this information retained in the operating record?	N/A	Yes ✓	No
9.	Is the impoundment inspected daily to check freeboard level?		Yes ✓	No
10.	Is the impoundment, dikes and vegetation surrounding the dike inspected weekly to detect leaks, deterioration or failures?		Yes ✓	No

*(Changed 9/10/82, response format realigned, other minor changes)
**See Note on Page 1
***This response column indicates noncompliance.

***

11. Does the impoundment have a liner? Yes___ No ✓

a. If Yes, what type? _____

_____.

b. If Yes, does it have a leachate collection and removal system? Yes___ No ✓

**12. Is there evidence of ignitable or reactive wastes placed in the impoundment? Yes___ No ✓

a. If Yes, explain in comments sheet [review 335.118(a)];
or
b. If Yes, is the impoundment used solely for emergencies? Yes___ No___

**13. Is there evidence of incompatible wastes placed in the impoundment [if yes, review 335.118(b)]? Yes___ No ✓

14. Are monitor wells required for this site? (~~Refer to Rule 335.191-.195 - Ground~~ Water Monitoring) Yes ✓ No PERMIT # WQ 00471

a. Has owner/operator installed, operated and maintained a ground water monitoring system (unless waived) prior to 11/19/81? Yes ✓ No___

NOTE 1: Attach Ground Water Monitoring Report if answer to question 14 is yes.
SEMIANNUAL APRIL '84 RESULTS ATTACHED

15. Describe impoundment(s) site and indicate plat map, location(s) and designation(s). Also describe each impoundment's dimensions and capacity (acre-feet): 2 cells, alternate use every 6 mos., sludge removed & placed in sanitary landfill; capacity - 0.83 acre-ft each. see item 14, FACILITY SKETCH.

NOTE 2: If the answer is No for Nos. 5a, 7a, 8, 9, 10 and No. 14 after 11/19/81, explain in comments sheet.

*(Changed 9/10/82, response formal realigned)
**See Note on Page 1
***See Note Page 3

Groundwater Data

Texas Eastman Company

1st Quarter, 1984

WELL NUM	AQUIFER	RES STAT	FACILITY	DATE	WTR LEVEL	PH	TOC	TOH	SP COND	CHLORIDE	IRON	MANGANESE	SULFATE	SODIUM	PHENOLS	CALCIUM	MAGNESIUM	POTASSIUM	BICARB ALK	NITRATE
3-S	SHAL	RCRA	LAGOON	840411	229.35	3.5	5	[illegible]	1500	50	[illegible]	[illegible]	155	130	0.022	64	50	[illegible]	[illegible]	[illegible]
5-S	SHAL	RCRA	LAGOON	840411	223.92	6.4	10	0.50	4500	445	[illegible]	4.5	1150	800	0.020	160	35	19	60	<1.0
9-S	SHAL	RCRA	LAGOON	840411	243.00	7.4	115	1.05	4000	523	5.3	[illegible]	[illegible]	980	0.050	55	15	15	150	[illegible]
14-S	SHAL	RCRA	BACKGROUND	840411	272.19	7.4	5	0.32	900	15	[illegible]	[illegible]	127	39	0.744	110	21	4.2	200	[illegible]
18-S	SHAL	RCRA	HOB	840411	270.47	7.7	7	1.42	850	70	1.5	[illegible]	[illegible]	65	0.270	90	28	18	[illegible]	[illegible]
19-S	SHAL	RCRA	HOB	840411	273.87	10.7	110	0.005	600	25	1	[illegible]	50	30	<0.004	41	[illegible]	30	60	[illegible]
20-S	SHAL	RCRA	HOB	840411	269.18	5.4	4000	0.25	3800	177	650	[illegible]	54	250	0.920	470	34	20	200	[illegible]
24-s[1]	shal	rcra	landfill	840411	250.62	7.3	250	0.50	1400	355	[illegible]	[illegible]	[illegible]	595	<0.004	30	39	[illegible]	240	[illegible]
25-S	SHAL	RCRA	LANDFILL	840411	250.70	7.4	[illegible]	1.44	750	33	4.2	1.8	[illegible]	14	<0.004	80	15	2.7	[illegible]	[illegible]
26-S	SHAL	RCRA	LANDFILL	840411	271.9	6.0	175	1.99	450	34	50	1.5	[illegible]	23	<0.004	14	15	2.1	100	[illegible]
27-S	SHAL	RCRA	LANDFILL	840411	260.4	7.5	10	2.79	500	68	4.9	1	112	110	<0.004	25	26	3.5	120	[illegible]
28-S	SHAL	RCRA	LANDFILL	840411	252.32	6.3	8	0.96	300	13	10	[illegible]	42	20	<0.004	10	11	3.2	40	[illegible]
29-s	SHAL	RCRA	LANDFILL	840411	251.3	6.7	13	[illegible]	320	25	15	1.3	[illegible]	11	0.004	15	9	2.1	40	[illegible]
MW-2	SHAL	TDWR	FA#1	840411	280.63	6.8	10		560											
MW-4	SHAL	TDWR	FA#2	840411	275.94	7.0	7		500											
W-4	SHAL	TDWR	TALLEY 1	840411	225.0	4.8	4150		9500											
W-7	SHAL	TDWR	TALLEY 1	840411	243.0	5.3	250		4350											
W-10	SHAL	TDWR	TALLEY 1	840411	243.58	5.5	435		3900											
17-S	SHAL	TDWR	CRO4 BASIN	840411	280.23	4.9	21		2350											

All parameters expressed as ppm except pH and specific conductivity

[1] Groundwater Quality Assessment Plan indicates 24-S monitors nonhazardous landfill

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report
Surface Impoundments Checklist (TAC 335.281-.288) Class of Waste (IH ***

WASTEWATER TREATMENT SYSTEM (WWTS) 15 Lagoons
FACILITY #3

1. Are surface impoundments presently used to treat & store waste? Yes ✓ No ___ see comment

   a. If yes, inspect the impoundments.

**2. Does the impoundment appear to maintain at least 2 feet (60 cm) of freeboard? Yes ✓ No ___

**3. Check for evidence of overtopping of the dike. Is the facility compliant? Yes ✓ No ___

**4. Check for evidence of seepage. Is the facility compliant? Yes ✓ No ___
HOWEVER, SHALLOW AQUIFER HAS BEEN CONTAMINATED

5. Containment system for dyked or dammed impoundments (335.283)

   **a. Does the earthen dike have a protective cover (e.g. grass, shale, rock) to minimize wind and water erosion? Yes ✓ No ___

6. What wastes are treated or stored in the impoundment? waste nos. 06, 09, 010, 011, 012, 013, 014 & 021. NPDES # TX0006949 TDWR # WQ0041/71.

7. Are waste analyses and trial tests conducted on these wastes (chemical processing of a different hazardous waste or method only)? N/A ___ Yes ✓ No ___

   a. If not, does the owner/operator have written documented information on similar treatment of similar wastes? Yes ___ No ___

8. Is this information retained in the operating record? N/A ___ Yes ✓ No ___

9. Is the impoundment inspected daily to check freeboard level? Yes ✓ No ___

10. Is the impoundment, dikes and vegetation surrounding the dike inspected weekly to detect leaks, deterioration or failures? Yes ✓ No ___

TDWR-

*(Changed 9/10/82, response format realigned, other minor changes)
**See Note on Page 1
***This response column indicates noncompliance.

***

11. Does the impoundment have a liner? Yes ___ No ✓

a. If Yes, what type? _____

b. If Yes, does it have a leachate collection and removal system? Yes ___ No ✓

**12. Is there evidence of ignitable or reactive wastes placed in the impoundment? Yes ✓ No ___

a. If Yes, explain in comments sheet [review 335.118(a)];
or
b. If Yes, is the impoundment used solely for emergencies? Yes ___ No ✓

**13. Is there evidence of incompatible wastes placed in the impoundment [if yes, review 335.118(b)]? Yes ___ No ✓

14. Are monitor wells required for this site? (Refer to Rule 335.191-.195 - Ground Water Monitoring) Yes ✓ No ___

a. Has owner/operator installed, operated and maintained a ground water monitoring system (unless waived) prior to 11/19/81? Yes ✓ No ___

NOTE 1: Attach Ground Water Monitoring Report if answer to question 14 is yes.
SEE TABLES 5 & 6 IN URM's 4-24-84 GROUND-WATER QUALITY ASSESSMENT REPORT.

15. Describe impoundment(s) site and indicate plat map, location(s) and designation(s). Also describe each impoundment's dimensions and capacity (acre-feet): LAST SAMPLING 7-9, 10-
see items 10A → K FACILITIES SKETCH
ALL PONDS COVER 532 acres. LAGOONS 1→3, skimming basins & DI Basin have total capacity (at 2' freeboard) of 7.06 X 10^7 gallons.

NOTE 2: If the answer is No for Nos. 5a, 7a, 8, 9, 10 and No. 14 after 11/19/81, explain in comments sheet.

*(Changed 9/10/82, response formal realigned)
**See Note on Page 1
***See Note Page 3

Checklist SURFACE IMPOUNDMENTS
(attach to correct checklist)

Date 7-16, 17-84

Reg./Permit No. 30137/HW50043-000

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: WWTS Paragraph: 1

THE COMPANY HAS HAD DELISTING PETITIONS INTO THE EPA FOR TWO YEARS FOR THE WASTEWATER TREATMENT SLUDGES IN LAGOONS 4-8 AND THE TALLYS. LAGOONS 1-3's SLUDGES HAVE BEEN DETERMINED TO BE HAZARDOUS. DURING THE INSPECTION, AERATED LAGOON 1 (ITEM 10B, FACILITIES SKETCH) HAD BEEN DEWATERED. THE COMPANY IS TRYING TO DECIDE HOW TO HANDLE THE SLUDGE &/OR CLOSURE.

SECTION: WWTS Paragraph: 12

IGNITABLE WASTES STREAMS ARE DILUTED WITH LARGE VOLUMES OF WATER IN THE PROCESS SEWERS.

SECTION: Paragraph:

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report
Surface Impoundments Checklist (TAC 335.281-.288)

FLY ASH POND NO. 1
FACILITY #9

Class of Waste (IN ***

1. Are surface impoundments presently used to treat or store waste? Yes ✓ No ___

   a. If yes, inspect the impoundments.

**2. Does the impoundment appear to maintain at least 2 feet (60 cm) of freeboard? Yes ✓ No ___

**3. Check for evidence of overtopping of the dike. Is the facility compliant? Yes ✓ No ___

**4. Check for evidence of seepage. Is the facility compliant? Yes ✓ No ___

5. Containment system for dyked or dammed impoundments (335.283)

   **a. Does the earthen dike have a protective cover (e.g. grass, shale, rock) to minimize wind and water erosion? Yes ✓ No ___

6. What wastes are treated or stored in the impoundment? waste nos. 028 (INIT) 029 (II)

7. Are waste analyses and trial tests conducted on these wastes (chemical processing of a different hazardous waste or method only)? N/A ___ Yes ✓ No ___

   a. If not, does the owner/operator have written documented information on similar treatment of similar wastes? Yes ___ No ___

8. Is this information retained in the operating record? N/A ___ Yes ✓ No ___

9. Is the impoundment inspected daily to check freeboard level? Yes ✓ No ___

10. Is the impoundment, dikes and vegetation surrounding the dike inspected weekly to detect leaks, deterioration or failures? Yes ✓ No ___

*(Changed 9/10/82, response format realigned, other minor changes)
**See Note on Page 1
***This response column indicates noncompliance.

***

11. Does the impoundment have a liner? Yes ✓ No ___

a. If Yes, what type? 2-3' compacted clay

b. If Yes, does it have a leachate collection and removal system? Yes ___ No ✓

**12. Is there evidence of ignitable or reactive wastes placed in the impoundment? Yes ___ No ✓

a. If Yes, explain in comments sheet [review 335.118(a)];
or
b. If Yes, is the impoundment used solely for emergencies? Yes ___ No ___

**13. Is there evidence of incompatible wastes placed in the impoundment [if yes, review 335.118(b)]? Yes ___ No ✓

14. Are monitor wells required for this site? (~~Refer to Rule 335.191-.195~~ Ground Water Monitoring) Yes ✓ No ✓ CLASS I @ NON-HAZARDOUS
PERMIT #WQ 00471 →

a. Has owner/operator installed, operated and maintained a ground water monitoring system (unless waived) prior to 11/19/81? Yes ✓ No ___
(MW-1)

NOTE 1: Attach Ground Water Monitoring Report if answer to question 14 is yes.
SEMI ANNUALLY APRIL '84 RESULTS ATTACHED

15. Describe impoundment(s) site and indicate plat map, location(s) and designation(s). Also describe each impoundment's dimensions and capacity (acre-feet): see item 29 FACILITY SKETCH. 2.9 acres and 13.2 acre-feet

NOTE 2: If the answer is No for Nos. 5a, 7a, 8, 9, 10 and No. 14 after 11/19/81, explain in comments sheet.

*(Changed 9/10/82, response formal realigned)
**See Note on Page 1
***See Note Page 3

Groundwater Data

Texas Eastman Company

1st Quarter, 1984

WELL NUM	AQUIFER	RES STAT	FACILITY	DATE	WTR LEVEL	PH	TOC	TOH	SP COND	CHLORIDE	IRON	MANGANESE	SULFATE	SODIUM	PHENOLS	CALCIUM	MAGNESIUM	POTASSIUM	BICARB ALK	NITRATE
3-S	SHAL	RCRA	LAGOON	840411	229.35	3.5	8	[illegible]	1500	500	3	1.2	165	150	[illegible]	64	50	10	200	<3.0
5-S	SHAL	RCRA	LAGOON	840411	[illegible]	6.4	10	0.52	4500	441	20	4.5	2150	800	0.020	160	35	19	60	<3.0
9-S	SHAL	RCRA	LAGOON	840411	240.90	7.4	115	1.05	4000	528	5.8	4.9	[illegible]	980	0.050	55	15	16	140	<3.0
14-S	SHAL	RCRA	BACKGROUND	840411	272.19	7.4	5	0.32	900	15	0.2	1.7	[illegible]	[illegible]	0.744	110	[illegible]	4.2	200	<6.0
18-S	SHAL	RCRA	HOP	840411	270.47	7.7	7	1.42	850	30	2.5	[illegible]	[illegible]	65	0.270	[illegible]	35	18	200	<3.0
19-S	SHAL	RCRA	HOB	840411	272.57	10.7	[illegible]	0.005	600	25	1	[illegible]	57	21	<0.004	41	1.7	20	60	<3.0
20-S	SHAL	RCRA	HOB	840411	259.15	5.4	4000	0.25	3800	177	650	[illegible]	54	250	0.520	470	34	20	200	<3.0
24-S[1]	shal	rcra	landfill	840411	250.82	7.8	250	0.32	2400	766	9.7	1.3	2	595	<0.004	31	37	[illegible]	340	<3.0
25-S	SHAL	RCRA	LANDFILL	840411	250.70	7.4	37/27	1.44	750	33	4.2	2.5	[illegible]	14	<0.004	80	15	2.7	200	<3.0
26-S	SHAL	RCRA	LANDFILL	840411	271.9	6.0	175	1.95	400	34	50	3.5	[illegible]	20	<0.004	14	15	2.1	100	<3.0
27-S	SHAL	RCRA	LANDFILL	840411	260.4	7.5	19	2.79	900	55	4.9	1	112	110	<0.004	25	26	3.5	120	<3.0
28-S	SHAL	RCRA	LANDFILL	840411	252.03	6.5	8	0.96	300	13	13	<.2	45	22	<0.004	10	11	2.2	40	<3.0
29-s	SHAL	RCRA	LANDFILL	840411	251.9	6.7	13	2.58	320	25	15	1.7	37	11	0.004	15	9	2.1	40	<3.0
MW-2	SHAL	TDWR	FA#1	840411	280.68	6.8	19		360											
MW-4	SHAL	TDWR	FA#2	840411	275.94	7.0	7		600											
W-4	SHAL	TDWR	TALLEY 1	840411	225.9	4.8	4150		9500											
W-7	SHAL	TDWR	TALLEY 1	840411	243.0	5.3	250		4050											
W-10	SHAL	TDWR	TALLEY 1	840411	243.58	5.5	435		3900											
17-S	SHAL	TDWR	CROW BASIN	840411	230.83	4.3	21		2350											

All parameters expressed as ppm except pH and specific conductivity

[1]Groundwater Quality Assessment Plan indicates 24-S monitors nonhazardous landfill

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report
Surface Impoundments Checklist (TAC 335.281-.288) Class of Waste (IN

FLY ASH POND NO. 1
FACILITY #9

***

1.	Are surface impoundments presently used to treat or store waste?	Yes ✓	No
	a. If yes, inspect the impoundments.		
**2.	Does the impoundment appear to maintain at least 2 feet (60 cm) of freeboard?	Yes ✓	No
**3.	Check for evidence of overtopping of the dike. Is the facility compliant?	Yes ✓	No
**4.	Check for evidence of seepage. Is the facility compliant?	Yes ✓	No
5.	Containment system for dyked or dammed impoundments (335.283)		
**a.	Does the earthen dike have a protective cover (e.g. grass, shale, rock) to minimize wind and water erosion?	Yes ✓	No
6.	What wastes are treated or stored in the impoundment?	waste nos. 028 (IN1) & 029 (II)	
7.	Are waste analyses and trial tests conducted on these wastes (chemical processing of a different hazardous waste or method only)?	N/A	Yes ✓ No
	a. If not, does the owner/operator have written documented information on similar treatment of similar wastes?		Yes No
8.	Is this information retained in the operating record?	N/A	Yes ✓ No
9.	Is the impoundment inspected daily to check freeboard level?		Yes ✓ No
10.	Is the impoundment, dikes and vegetation surrounding the dike inspected weekly to detect leaks, deterioration or failures?		Yes ✓ No

TDWR-
Page 3 of 30 of Group II
*(Changed 9/10/82, response format realigned, other minor changes)
**See Note on Page 1
***This response column indicates noncompliance.

***

11. Does the impoundment have a liner? Yes___ No___

a. If Yes, what type? _____

_____.

b. If Yes, does it have a leachate collection and removal system? Yes___ No___

**12. Is there evidence of ignitable or reactive wastes placed in the impoundment? Yes___ No___

a. If Yes, explain in comments sheet [review 335.118(a)];
or
b. If Yes, is the impoundment used solely for emergencies? Yes___ No___

**13. Is there evidence of incompatible wastes placed in the impoundment [if yes, review 335.118(b)]? Yes___ No___

14. Are monitor wells required for this site? (Refer to Rule 335.191-.195 - Ground Water Monitoring) Yes__ No___

a. Has owner/operator installed, operated and maintained a ground water monitoring system (unless waived) prior to 11/19/81? Yes___ No___

NOTE 1: Attach Ground Water Monitoring Report if answer to question 14 is yes.

15. Describe impoundment(s) site and indicate plat map, location(s) and designation(s). Also describe each impoundment's dimensions and capacity (acre-feet): _____

_____

_____.

NOTE 2: If the answer is No for Nos. 5a, 7a, 8, 9, 10 and No. 14 after 11/19/81, explain in comments sheet.

DURING THE 7-16,17-84 INSPECTION, FLY ASH POND #2 WAS SUBSTANTIALLY CLOSED. THE SITE HAD BEEN CONTOURED AND AN INTERMEDIATE COVER PLACED. FINAL CAPPING WILL LIKELY OCCUR W/IN THE NEXT 60 DAYS.

*(Changed 9/10/82, response formal realigned)
**See Note on Page 1
***See Note Page 3

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report
Tanks Checklist (Rule 335.261-.267)
BY-PRODUCT FUEL STORAGE SYSTEM
FACILITY #5

Section A - General ***

1. Are tanks presently used to ~~treat or~~ store waste? Yes ✓ No ___

   a. If no, do not complete rest of form. This system may be exempt under TAC 335.41(g)(1)

   b. If yes, check tanks. ~~(Describe~~ type of tank and indicate underground, above ground, or on-ground in comments sheet).

   c. Is there evidence that incompatible wastes have been placed in the tank? Yes ___ No ✓

      (1) If yes, refer to 335.118(b) and explain in comments sheet.

   d. Check tank(s) for evidence of any ruptures, leaks or corrosion. Is facility compliant [335.264(a)(4)]? Yes ✓ No ___

2. Are there any uncovered tanks? Yes ___ No ✓

   a. If no, do not complete b. - e.

   b. If yes, do they have 2 feet (60 cm) freeboard? or N/A ___ Yes ___ No[1] ___

   c. A containment structure? (e.g. dike or trench equal to volume of 2 feet of tank) or N/A ___ Yes ___ No[1] ___

   d. A drainage control system? N/A ___ Yes ___ No[1] ___

   e. A diversion structure? (e.g. standby tank) N/A ___ Yes ___ No[1] ___
      NOTE 1: The structure in c, d or e must have a capacity that equals or exceeds the volume of the top 2 feet (60 cm) of the tank; any one yes answer for 2b, c, d or e indicates compliance.

3. Are any of the tanks continuous feed? Yes ___ No ✓

   a. If yes, is it equipped with a means to stop inflow (e.g. waste feed cutoff or bypass to a stand-by tank)? Yes ___ No ___

Section B - Waste Analysis

1. Is the tank used to store one waste exclusively? Yes ✓ No ___

   a. If no, what are the different wastes stored in the tank?

   _____

   _____

   _____

   _____

*(Changed 9/10/82, added *** note and reworded some questions)
**Note checklist questions to be noted or completed during on-site inspection
***No checked in this column indicates noncompliance.

b. Are waste analyses and trial treatment or storage tests done on these different wastes? NOTE 1: Not applicable for less than 90 day storage [335.69(a)(2)]. N/A___ Yes ✓ No___ ***

(1) If no, does he have written, documented information on similar storage or treatment of similar wastes? N/A___ Yes___ No___

c. Are there records available of these wastes analyses in the operating record? N/A___ Yes ✓ No___

Section C - Inspections (Where Present) 335.264

1. Do the records indicate the owner/operator inspects, where present, the following at least daily:

a. Discharge control equipment (e.g. waste feed cut-off, bypass and/or drainage system)? Yes ✓ No___

b. Monitoring equipment (e.g. pressure and temperature gages)? Yes ✓ No___

c. Level of waste in each uncovered tank? N/A ✓ Yes___ No___

2. Do the records indicate the owner/operator inspects the following at least weekly:

a. Construction materials of tanks for corrosion or leaks? Yes ✓ No___

b. Construction materials of and area surrounding discharge confinement structures for erosion or signs of leakage? Yes ✓ No___

3. Is there a written inspection schedule (Rule 335.116)? Yes ✓ No___

a. If yes, is the schedule kept at the site? Yes ✓ No___

b. If no for 3 or 3a, explain in the comments sheet.

4. Is there evidence of ignitable wastes placed in tanks? Yes ✓ No___

a. If yes, do records indicate that they are treated, rendered, or mixed before or immediately after placement in the tank so it no longer meets the definition of ignitable? or Yes___ No[2] ✓

** b. Is the waste protected from sources of ignition? Yes ✓ No[2]___

(1) If yes, use comments sheet to describe separation and confinement procedures. System is enclosed from storage to boiler feed; ~~no~~ smoking is prohibited in loading areas.

(2) If no, use comments sheet to describe sources of ignition. or

TDWR-
Page 10 of 30 of Group II
*(Changed 9/10/82, added *** note and 2 notes added)
**See Note on Page 9
***See Note on Page 9

c. Is the tank used solely for emergencies? Yes___ No[2] ✓ ***
NOTE 2: Only one of the three questions 4a, b, c answered yes indicates compliance.

5. Is there evidence of reactive wastes placed in tanks? Yes___ No ✓

a. If yes, do records indicate that they are treated rendered, or mixed before or immediately after placement in the tank so it no longer meets the definition of reactive? or Yes___ No[1]___

**b. Is the waste protected from sources of reaction? Yes___ No[1]___

(1) If yes, use comments sheet to describe separation and confinement procedures.

(2) If no, use comments sheet to describe sources of reaction. or

c. Is the tank used solely for emergencies? Yes___ No[1]___
NOTE 1: Only one of the three questions 5a, b, c answered yes indicates compliance.

6. Do the records indicate that incompatible wastes are placed in the same tank? Yes___ No ✓

a. If yes, review 335.118(b) and explain in the comments sheet.

7. If a waste is to be placed in a tank that previously held an incompatible waste do operating records indicate that the tank was washed? Yes___ No___ N/A ✓

a. If yes, review 335.118(b) and describe washing procedures. ________________

____

b. Describe how it is possible for incompatible waste to be placed in the same tank. ________________

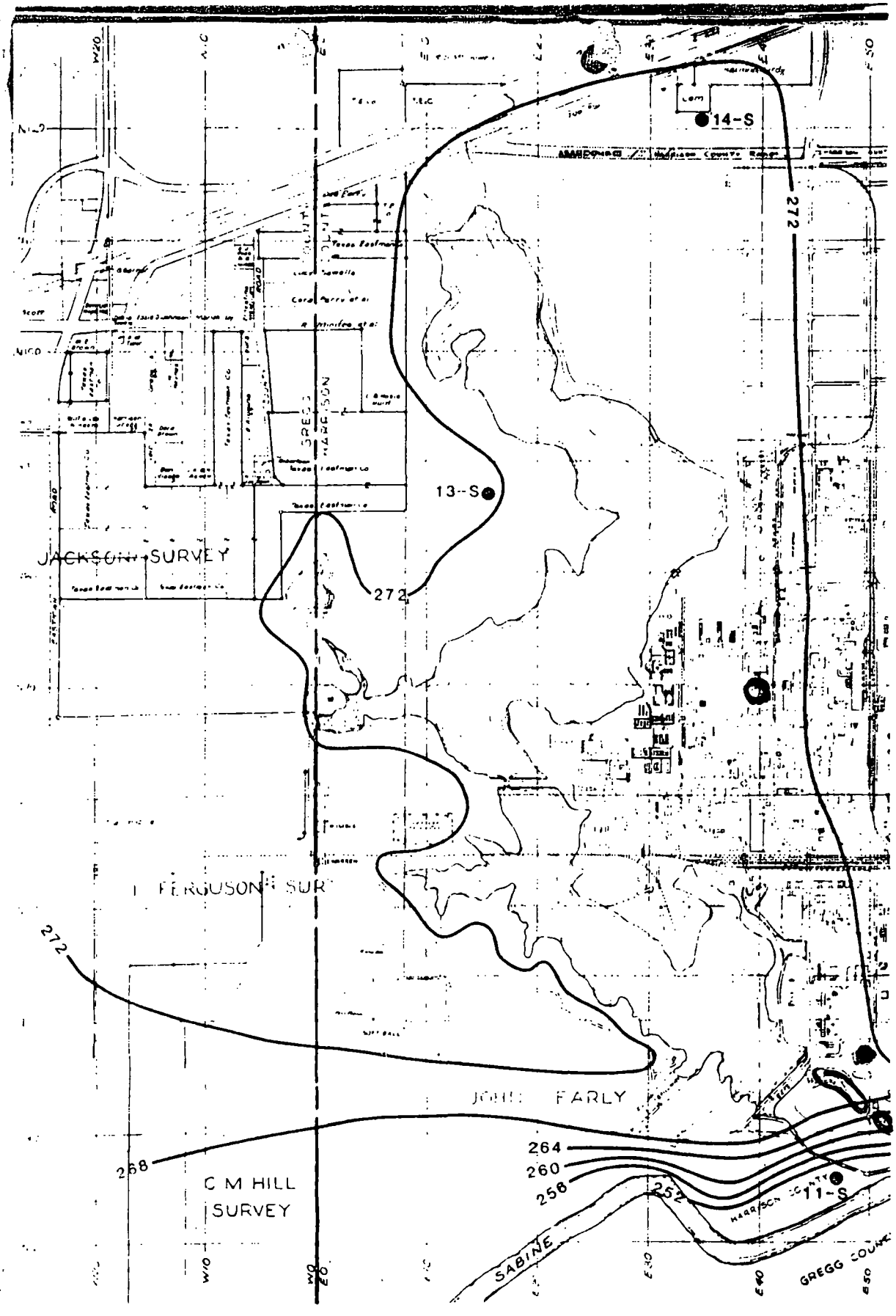
____

____

NOTE: If the answer to Section A [illegible] Section C [illegible]

8. Describe tank(s) site and indicate plat map location(s) and designation(s). Also describe size and capacity of each tank: see item 32, FACILITY SKETCH, 3, 10,000 gal & 1, 5,000 gal tank feed the main boiler feed tank that has 20,000 gal capacity.

*(Changed 9/10/82)
**See Note on Page 9
***See Note on Page 9



SHALLOW WELL PIEZOMETRIC SURFACE AND INTERIM STATUS MONITORING WELL LOCATIONS

from URM PHASE II REPORT

This Document Contained Material Which Was Not Filmed/Scanned

Title Oversized Map for Texas Eastman Co

Please Refer to the File in Superfund Records Center

Approximate Direction of Groundwater Movement

—250— Line of equal elevation

Contour interval is 4 feet

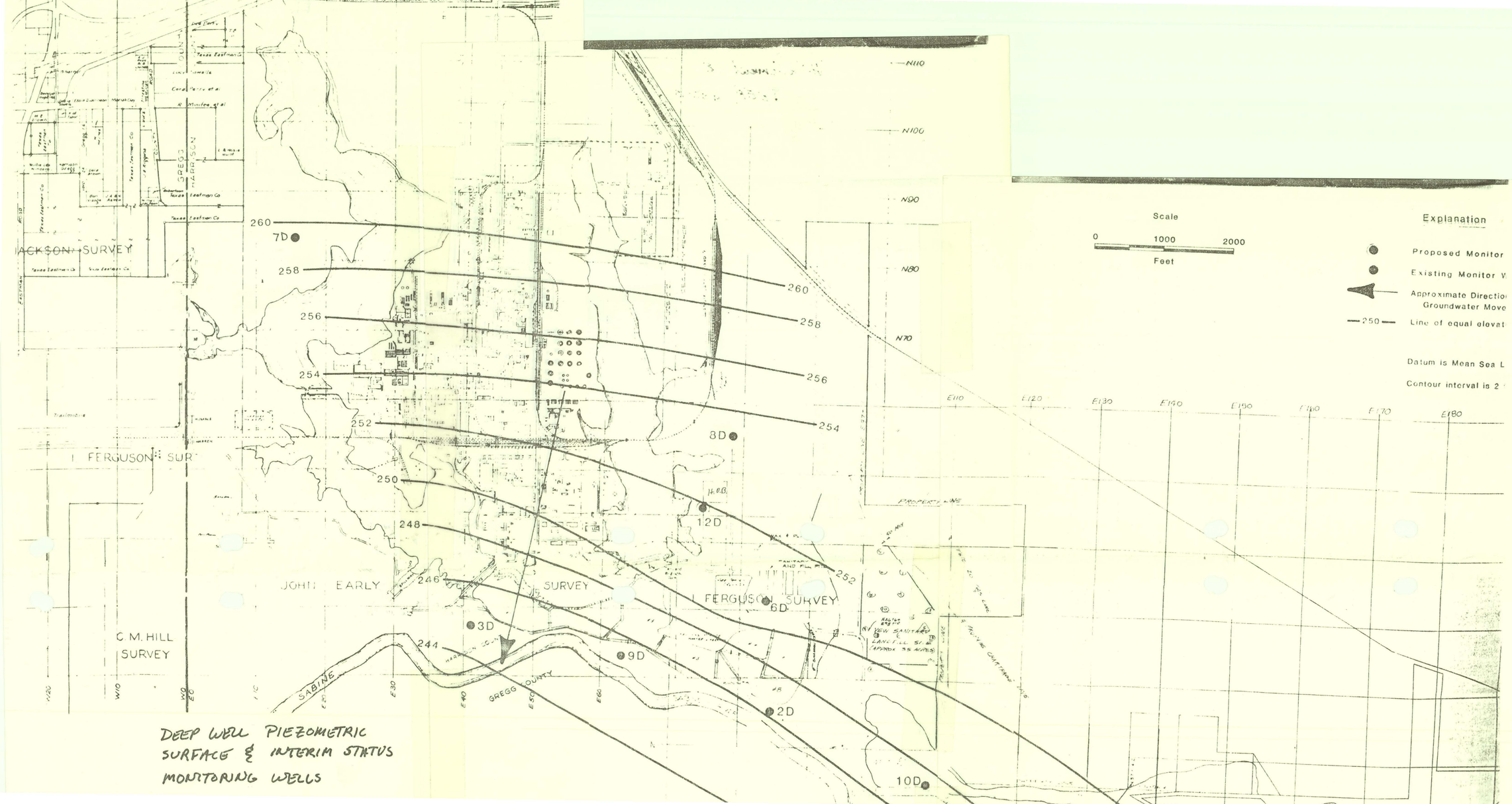
Datum is Mean Sea Level

MW-4
MW-1
MW-2
16-S
17-S
18-S
19-S
20-S
22-S
23-S
9-S
24-S
25-S
7-S
6-S
W-4
W-7
W-10
284
280
276
272
268
264
260
256
252
248
244
240
236
232
228
E110
E120
E130
E140
E150
E160
E170
E180
E190
CHROM SETTLI BASINS
closed
SANITARY AND FILL PITS
FERGUSON SURVEY
SPECIAL WASTE LANDFILL
Talley 1A
Talley 1B
(inactive)
Talley 2
Talley 3
Talley 4
Talley 5
PROPERTY LINE

This Document Contained Material Which Was Not Filmed/Scanned

Title Oversized Map of Deep Well Piezometric Surface & Interim Status Monitoring Wells

Please Refer to the File in Superfund Records Center



DEEP WELL PIEZOMETRIC SURFACE & INTERIM STATUS MONITORING WELLS

Compliance Monitoring Inspection Report
Ground Water Monitoring Program (335.191-.195)

1. Ground Water Monitoring Status:
   Detection _____ : quarterly sampling ✓ ; semi annual sampling _____
   Alternate _____ (date approved) Waiver _____ (date approved)
   Assessment 7-20-83 (date approved) Required but not monitoring _____

	Yes	No	Not Applicable
2. Has the following been installed in the uppermost aquifer around the waste management area(s):			
At least one hydraulically upgradient well?	✓		
At least three hydraulically downgradient wells?	✓		
3. If the waste management area includes multiple waste management facilities, is each facility adequately monitored?	✓		
4. Provide a diagram locating each monitoring well and waste site(s). List depths, diameter and completion data on each well not included on the previous inspection.			
5. Has an adequate ground water sampling and analysis plan been developed? Date of evaluation: _____ If not, list deficiencies:	✓		
Is the plan followed?	✓		
6. If monitoring for the first year, are the samples analyzed for:			✓
EPA drinking water standards?			
Ground water quality parameters?			
Ground water contamination parameters?			
Are 4 replicate measurements made for each upgradient well sample?			
Are ground water surface elevations determined at each well each sampling event?			
7. Does the facility have an adequate Ground Water Quality Assessment Plan outline? Date of evaluation: 7-20-83	✓		

8. For facilities in their second or later year of ground water sampling and analysis:

	Yes	No	Not Applicable
Are wells sampled and analyzed annually for ground water quality parameters?	✓		
Are wells sampled and analyzed semi-annually for ground water contamination parameters?	✓		
Are ground water surface elevations determined at each well for each sampling event?	✓		
Were ground water surface elevations evaluated annually to determine whether monitoring wells are properly placed?	✓		
Were changes to the monitoring system necessary, to maintain compliance with 335.192(a)?		✓	

If so, describe:

Are 4 replicate measurements made for each upgradient and downgradient well sample? If not, explain:	✓		

9. Are statistical comparisons, using the Student's t-test at the 0.01 level of significance, performed:

Between the initial background mean and current upgradient well analyses for contaminated parameters?	✓	
Between the initial background mean and current downgradient well analyses for contamination parameters?	✓	

If there is more than one upgradient well, are all the background data combined resulting in one background mean with variance for each contamination parameter or is each upgradient well mean and variance compared separately with downgradient well analyses? Circle appropriate phrase. N/A ✓

10. No significant increases (or pH decreases) in contamination parameters been found in the:

Upgradient wells?	✓		
If no, did the company report the upgradient well change on the annual report form?			
Downgradient wells?		✓	

If significant increases (or pH decreases) in downgradient wells were detected, did the company:	Yes	No	Not Applicable
Resample the "affected" well(s), split the sample in two and analyze for the respective changing contamination indicator(s)?	✓		
Confirm the significant difference?	✓		
Notify the Executive Director within 7 days of confirmation?	✓		
Submit a certified ground water quality assessment plan within 15 days of notifying Executive Director?	✓		

12. If an assessment program is on-going, describe what has been completed so far.

ASSESSMENT REPORT SUBMITTED 4-24-84, TDWR 6-29-84 RESPONSE ATTACHED

What is the expected completion date?

13. Ground water analyses indicate no hazardous waste or hazardous waste constituents detected?		✓	
If yes, was the original detection monitoring program reinstated?			
If no, has an approved quarterly ground water monitoring program been implemented?	✓	FIRST SAMPLING 7-10-84	
14. If the company is performing an alternate ground water monitoring program, is an adequate sampling and analysis plan followed?			N/A ✓
15. Are all wells sampled with the same equipment and procedures? NO / YES	✓		
Is sampling equipment cleaned between wells to prevent cross-contamination?		✓ each well has its own BAILER	
16. Have records been kept of:			
Analyses for ground water parameters?	✓		
Calculations of means and variances?	✓		
Water surface elevations taken at each well each sampling event?	✓		
Calculations of significant differences?	✓		

(Continued)

	Yes	No	Not Applicable
Analyses of duplicate samples for contamination confirmation?	✓		
Analyses of samples taken as a result of implementing the Ground Water Quality Assessment Plan?	✓		
Results of Ground Water Quality Assessment Plan:			
Rates of migration?	✓		
Concentration of hazardous waste and/or constituents thereof?	✓		
Analyses of quarterly ground water samples?	✓ In process		

INDUSTRIAL SOLID WASTE

*Closure and Post-Closure Compliance Review Checklist
(TAC Section 335.211-.220

**

Note: List each type of hazardous waste T, S, D facility, number and volume in the comments sheet.

I. CLOSURE PLAN; Is there a written plan? Yes ✓ No ___

1. Does the plan identify the *MAXIMUM EXTENT OF OPERATION which will be unclosed during the life of the facility? Yes ✓ No ___

*Note: The rules [335.213(a)(1)] require that the closure plans identify the maximum extent of the operation which will be unclosed during the life of the facility. If the plan is based on the expected extent of operations to be closed just prior to closure, it is important to consider whether that represents the "maximum" in this question.

2. Does the plan identify the steps for PARTIAL and/or COMPLETE CLOSURE [335.213(a)], at any time during the intended operating life, of

a. surface impoundments? N/A ___ Yes ✓ No ___

b. landfills? N/A ___ Yes ✓ No ___

c. tanks? N/A ___ Yes ✓ No ___

d. other (specify: _____) Yes ___ No ___

3. Is there an estimate of the MAXIMUM INVENTORY of wastes in storage or treatment at any time during the life of the facility? N/A ___ Yes ✓ No ___

4. Does the plan clearly identify the STEPS TO CLOSE [335.213(a)]?

a. at any point during the intended operating life? Yes ✓ No ___

b. at the end of the intended operating life? Yes ✓ No ___

*(Changed 10/13/83, added question to 1 above; this checklist is for use with "Part A" permit applicants that have not submitted "Part B" application)
**This response column indicates noncompliance.

**

5. Are the following STEPS TO CLOSE included in the plan:

a.	removal of wastes [335.214(a)]?	N/A___	Yes ✓	No___
b.	treatment of wastes [335.214(a)]?	N/A___	Yes ✓	No___
c.	waste disposal [335.214(a)]?	N/A___	Yes ✓	No___
d.	cover [335.344(a)]?*	N/A___	Yes ✓	No___
e.	decontamination of equipment and structures [335.213(a)(3)]?	N/A___	Yes ✓	No___
f.	closure certification [335.216]?	N/A___	Yes ✓	No___

6. Does the plan describe the DECONTAMINATION [335.213(a)(3)] of facility equipment and structures? N/A___ Yes ✓ No___

7. With respect to CERTIFICATION of closure (335.216), does the closure plan describe scheduled or estimated number of inspections? Yes ✓ No___

8. Does the plan identify the YEAR when closure is expected to occur [335.213(a)(4)]? Year See below Yes ✓ No___

9. Is there a SCHEDULE for final closure activities [335.213(a)(4)]? Yes ✓ No___

10. Closure plan evaluated 8-7-84 (date) : Adequate Yes ✓ No___

COMMENTS

#8. By-Product Recovery - 2050; Special Waste Storage Area - 2050; Heavy Organics Basin - 1991; Special Waste Landfill - 1985; Wastewater Treatment System - 2050; and Incinerator - 2014.

The closure/post-closure plans reviewed this year were developed in response to FY 83 inspection's

*(Changed 10/13/83, added checklist question No. 10)
**This response column indicates noncompliance.

letter of deficiencies

*(Changed 10/13/83, added checklist for use with "Part A" permit applicants that have not submitted "Part B" application)
**This response column indicates noncompliance.

**

II. POST-CLOSURE PLAN CHECKLIST; Is there a written plan? *N/A___ Yes ✓ No___

REQUIRED FOR: SPECIAL WASTES LANDFILL, HEAVY ORGANICS BASIN, AND WASTEWATER TREATMENT SYSTE

*Note: If no post-closure required, proceed to Cost Estimate Checklist.

1. Does the post-closure plan provide for 30 years of post-closure care? N/A___ Yes ✓ No___

   How many years of post-closure care? _____

2. Does the plan clearly identify the ACTIVITIES required in the post-closure care? Yes ✓ No___

3. Do the MAINTENANCE PLANS for waste containment structures [335.218(a)(2)] include:

   a. maintaining final cover (erosion damage repair) frequencies [335.344(d)(1)]? Yes ✓ No___

   b. vegetation and fertilizing frequencies [335.218(a)(2)(A)]? Yes ✓ No___

   c. collecting, removing, and treating leachate activities [335.344(d)(2)]? N/A ✓ Yes___ No___

   d. collecting, removing, and treating leachate frequencies [335.344(d)(2)]? N/A ✓ Yes___ No___

   e. gas collection activities [335.344(d)(3)]? N/A ✓ Yes___ No___

   f. gas collection frequencies [335.344(d)(3)]? N/A ✓ Yes___ No___

4. Do MONITORING EQUIPMENT MAINTENANCE plans [335.218(a)(2)(B)] include:

   a. activities? Yes ✓ No___

   b. frequencies? Yes ✓ No___

5. Does the plan identify the name, address and phone number of the POST-CLOSURE PERIOD CONTACT [335.218(a)(3)]? Yes ✓ No___

*(Changed 10/13/82; added checklist for use with "Part A" permit applicants that have not submitted "Part B" application)
**This response column indicates noncompliance.

**

6. For landfills, does the post-closure plan address the following objectives and indicate how they will be achieved [335.344(b)]?

   a. Control of pollution migration via ground water, surface water, and air. N/A___ Yes ✓ No___

   b. Control of surface water infiltration, including prevention of pooling. N/A___ Yes ✓ No___

   c. Prevention of erosion. N/A___ Yes ✓ No___

7. For land treatment operations, does the post-closure plan address the following objectives and indicate how they will be achieved [335.327(a)]?

   a. Control of migration of hazardous wastes and constituents into the ground water. N/A ✓ Yes___ No___

   b. Control of the release of contaminated runoff into surface water. N/A___ Yes___ No___

   c. Control of the release of airborne particulate contaminants caused by wind erosion. N/A___ Yes___ No___

   d. Protection of food chain crops. N/A___ Yes___ No___

8. For landfills and land treatment operations, does the post-closure plan include at least a narrative statement indicating that the following factors were considered in addressing the closure objectives [335.327(b), 335.344(b)]?

   a. Type and amount of waste. N/A___ Yes ✓ No___

   b. Mobility and rate of migration. N/A___ Yes ✓ No___

   c. Site location, topography, and surrounding land use. N/A___ Yes ✓ No___

   d. Climate, including precipitation. N/A___ Yes ✓ No___

   e. Characteristics of the cover, including material, final surface contour, thickness, porosity, permeability, slope, vegetation. N/A___ Yes ✓ No___

*(Changed 9/30/82, added checklist for use with "Part A" permit applicants that have not submitted "Part B" application)
**This response column indicates noncompliance.

**

f. Geological and soil profiles and surface and subsurface hydrology. N/A ✓ Yes ___ No ___

g. Unsaturated zone monitoring. N/A ✓ Yes ___ No ___

h. Type, concentration, and depth of hazardous constituent migration as compared to background concentrations. N/A ✓ Yes ___ No ___

9. Does the plan address the requirement for notice to the local land authority (335.219)? Yes ✓ No ___

10. Does the plan address the requirement for notice in the deed (335.220)? Yes ✓ No ___

11. Post closure plan evaluated 7-30-84 (Date) Adequate Yes ✓ No ___

COMMENTS

Very thorough.

TDWR-

*(Changed 10/13/83; added checklist for use with "Part A" permit applicants that have not submitted "Part B" application)
**This response column indicates noncompliance.

**

III. COST ESTIMATE; Evaluated: 7-27-84 (date) N/A___ Yes ✓ No___

1. Is there a written closure cost estimate [335.232(a)] (Supp. 14 of Group I for estimated cost? Yes ✓ No___

2. Is the closure cost estimate adequate to cover all required closure activities [335.232(a)]? Yes ✓ No___

   If "No", specify in comments.

3. Is there a written post-closure cost estimate [335.233(a)]? N/A___ Yes ✓ No___

4. Is the annual estimate multiplied by 30 to cover the entire post-closure care period [335.233(b)]? Yes ✓ No___

   or number of years ____

5. Is the cost estimate adequate to cover all the activities in the post-closure plan [335.218(a)]? Yes ✓ No___

   Including labor costs? Yes ✓ No___

   As well as the requirements of notice to local land authorities and in deeds (335.219 and .220)? Yes ✓ No___

} included in closure costs

COMMENTS

TDWR-
Page 30 of 30 of Group II
*(Changed 10/13/83, added checklist for use with "Part A" permit applicants that have not submitted "Part B" application)
**This response column indicates noncompliance.

Compliance Monitoring Inspection Report
Financial Assurance, Closure and Post Closure Worksheet

To be completed if the facility treats, stores or disposes of hazardous waste such that a permit is required or if the facility has submitted a Part A Application.

EPA No. TXD 007330202
Facility: TEXAS EASTMAN CO. Permit/~~Reg. No.~~ HW50043-000
Address: POB 7444 LONGVIEW, TEXAS Inspection Date JULY 16-17, 1984
Facility Owner/Operator Fiscal Year End: Month _____ Day _____

1. Preinspection call to ~~Bob Brydson (2041)~~ RUSS KIMBLE confirms the facility has submitted current financial assurance documents. Yes ✓ No ___ N/A ___
If yes, check the documents submitted:

- ☑ Sudden liability amount $1 MILL. per occurrence, $2 MILL. annual
- ☑ Non-Sudden liability amount $3 MILL. per occurrence, $6 MILL. annual
- ☑ Closure assurance amount $5,164,000
- ☑ Post Closure assurance amount $715,000

2. ~~Brydson~~ KIMBLE reports documents adequate Yes ✓ No ___ N/A ___
If no, list problems _____

For the following questions, review appropriate inspection checklist answers (Group I-Major pages 8-10, Non-major-page 3, and Group II-pages 21-27)

3. Closure Plan is adequate Yes ✓ No ___ N/A ___

4. Closure Cost Estimate, amount $5,164,000, is adequate Yes ___ No ✓ N/A ___
If no, list proper amount $10,664,000

5. Post Closure Plan is adequate Yes ✓ No ___ N/A ___

6. Post Closure Cost Estimate, amount $715,000, is adequate Yes ✓ No ___ N/A ___
If no, list proper amount $ _____

7. Facility has provided financial assurances for closure Yes ✓ No ___ N/A ___
If yes, date effective 3-23-84 Date expires 3-23-86
Instrument FINANCIAL TEST

8. Facility has provided financial assurances for post closure Yes ✓ No ___ N/A ___
If yes, date effective 3-23-84 Date expires 3-23-85
Instrument FINANCIAL TEST

9. Facility has provided appropriate sudden liability coverage Yes ✓ No ___ N/A ___
If yes, date effective 3-23-84 Date expires 3-23-85
Instrument FINANCIAL TEST

10. Facility has provided appropriate non-sudden liability coverage Yes ___ No ___ N/A ___
If yes, date effective 3-23-84 Date expires 3-23-85
Instrument FINANCIAL TEST

FORM SUBMITTED

By: I. M. DAVIS

Date: 7-16,17-84

MAJOR FACILITIES STATUS SHEET
Initial ✓ Update ____

ID No.: IXD007330202 Registration/~~Permit No.~~: 30137/HW50043-000

Facility Name: TEXAS EASTMAN CO. District No.: 05

1. Ground Water Monitoring Status

Detection		Waiver	
Assessment	✓	NA	

2. Ground Water Monitoring Well System

a. Evaluated?	NA		NE	DATE EVAL'D
b. Adequate?	YES		NO	

3. Ground Water Sampling, Analysis and Evaluation Program

a. Evaluated?	NA		NE	DATE EVAL'D 6-3-82 (INITIAL RESPONSE TO PHASE II REPORT)
b. Adequate?	YES		NO	

4. Notice of Significant Increase in Parameter Concentrations (SEE 9-20-83 INSP. REPORT FOR EVALUATION)

Submitted?	NA		NO	DATE SUB'D 6-3-83

5. Ground Water Quality Assessment Report

a. Submitted?	NA	NO	DATE SUB'D 4-24-84
b. Evaluated?	NE	DATE EVAL'D 6-29-84	
c. Adequate?	YES ✓ with suggestions	NO	
d. Showed hazardous waste constituents in ground water?			
	YES ✓	NO	

6. Waiver Demonstration

a. Evaluated?	NA ✓		NE	DATE EVAL'D
b. Adequate?	YES		NO	

7. Ground Water Monitoring Records

a. Evaluated?	NA		NE	DATE EVAL'D 7-16,17-84
b. Adequate?	YES ✓		NP	

ID # TXD007330202

8. Activities Subject to Closure/Post-Closure

Landfill 1
Surface Impoundment 16 17
Land Treatment/Application NA
Incinerator 1
Waste Pile NA
Other (Specify) STORAGE AREA

9. Closure Plan

a. Evaluated? NE ___ DATE EVAL'D 7-27-84
b. Adequate? YES ✓ NO ___

10. Closure Cost Estimate

a. Evaluated? NA ___ NE ___ DATE EVAL'D 7-27-84
b. Adequate? YES ✓ NO ___
c. Amount: $ 10,664,000 UNKNOWN ___

11. Closure Assurance Instrument(s)

a. Evaluated? NA ___ NE ✓ DATE EVAL'D ___
b. Adequate? YES ___ NO ✓ NO INSTRUMENT
c. Type(s): COVERS ONLY $5,164,000

TRUST FUND ___
FINANCIAL BOND ___
PERFORMANCE BOND ___
LETTER OF CREDIT ___
INSURANCE ___
FINANCIAL TEST ✓
CORPORATE GUARANTEE ___
STATE GUARANTEE ___
OTHER STATE MECHANISM ___

12. Post-Closure Plan

a. Evaluated? NA ___ NE ___ DATE EVAL'D 7-30-84
b. Adequate? YES ✓ NO ___

13. Post-Closure Cost Estimate

a. Evaluated? NA ___ NE ___ DATE EVAL'D 7-27-84
b. Adequate? YES ✓ NO ___
c. Amount: $ 715,000 UNKNOWN ___

14. Post-Closure Assurance Instrument(s)

a. Evaluated? NA ___ NE ___ DATE EVAL'D ___
b. Adequate? YES ✓ NO ___ NO INSTRUMENT ___
c. Type(s):

TRUST FUND ___
FINANCIAL BOND ___
PERFORMANCE BOND ___
LETTER OF CREDIT ___
INSURANCE ___
FINANCIAL TEST ✓
CORPORATE GUARANTEE ___
STATE GUARANTEE ___
OTHER STATE MECHANISM ___

ID # TXD 007330202

15. Sudden Liability Instrument(s)

a. Evaluated? NA___ NE___ DATE EVAL'D 5-10-84
b. Adequate? YES ✓ NO___ NO INSTRUMENT___
c. Amount: $ 1 MILL per occurrence, $ 2 MILL annual aggregate
d. Type(s):
INSURANCE POLICY ✓ STATE GUARANTEE___
FINANCIAL TEST ✓ OTHER STATE MECHANISM___

16. Nonsudden Liability Instrument(s)

a. Evaluated? NA___ NE___ DATE EVAL'D 5-10-84
b. Adequate? YES ✓ NO___ NO INSTRUMENT___
c. Amount: $ 3 MILL per occurrence, $ 6 MILL annual aggregate
d. Type(s):
INSURANCE POLICY ✓ STATE GUARANTEE___
FINANCIAL TEST ✓ OTHER STATE MECHANISM___

17. Closure Process

a. Process Begun? NO ✓ DATE BEGUN___
b. In accordance with approved plan and required procedures? YES___ NO___
c. Closure certifications received? NO___ DATE REC'D___
d. Facility released from closure assurance and liability requirements? NA___ NO___ DATE RELEASED___

18. Post-Closure Process

a. Process Begun? NA___ NO ✓ DATE BEGUN___
b. In accordance with approved plan and required procedures? YES___ NO___
c. Survey plat/Record of wastes received? NO___ DATE REC'D___
d. Post-closure period completed? NO___ DATE COMPLETED___
e. Facility released from post-closure assurance requirements? NA___ NO___ DATE RELEASED___

19. Permit Application

a. Called? NO ✓ DATE CALLED___
b. Reason? GROUND WATER___ FINANCIAL ASSURANCE___
CLOSURE___ LIABILITY COVERAGE___
OTHER___

Table 1 (Cont.)

FACILITY	Location	Date Sampled	Ca	Mg	Na	K	HCO_3	Cl	NO_3	F	Ba	Co	Cu	Pb	Mn	Zn	PALK	pH	TOC	TDS	TSS	TS	SC
HOB	TEX-20-S	10/22/81	400	70	350	13.3	-	447	<3	-	10	0.2	<0.1	-	7.7	0.1	<1	5.5	5100	5126	148	5274	-
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0	5305	-	-	-	4250
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	4650	-	-	-	4675
Closed	TEX-22-S	10/22/81	70	5	42	1.2	-	58	<3	-	1	<0.1	<0.1	-	0.7	<0.1	<1	6.7	23	348	124	472	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	7	-	-	-	480
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	7	-	-	-	480
C	TEX-23-S	10/22/81	14	7	43	4.0	-	70	<3	-	1	<0.1	<0.1	-	1.1	<0.1	<1	5.3	45	348	58	406	-
Sanitary		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1	18	-	-	-	600
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.8	16	-	-	-	650
SWL	TEX-24-S	11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	8	-	-	-	625
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	6	-	-	-	675
SWL	TEX-25-S	11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	8	-	-	-	625
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	7	-	-	-	688
Lagoon 8	TEX-2-D	07/22/81	1.7	0.7	310	6	400	48	<1	4.6	<1	<0.1	<0.1	<1	<0.1	0.1	-	8.8	21	-	-	-	1400
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.7	4	-	-	-	1200
Lagoon 1	TEX-3-D	07/22/81	1.7	1.1	305	23	360	159	<1	<4	1	<0.1	<0.1	<1	0.1	0.2	-	8.7	67	-	-	-	1400
Talley 3	TEX-4-D	07/22/81	1.9	0.6	220	4.3	400	59.6	<1	<4	<1	<0.1	<0.1	<1	0.1	0.1	-	8.7	10	-	-	-	975
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.2	13	-	-	-	950
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.4	4	-	-	-	869
		11/12/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.6	4	-	-	-	900
SWL.	TEX-6-D	11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.6	14	-	-	-	1400
UPDIP	TEX-7-D	07/23/81	2.9	1.2	95	40	212	28.3	<1	4.3	2	<0.1	0.1	-	-	0.5	-	8.9	100	-	-	-	550
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.0	9	-	-	-	1800
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.0	9	-	-	-	750
		11/12/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.5	10	-	-	-	1078
CHROMATE BASINS	TEX-8-D	07/23/81	0.4	0.1	120	13	100	31.2	<1	7.5	<1	<0.1	<0.1	<1	<0.1	0.1	-	10.8	14	-	-	-	700
		10/22/81	14	5	150	10	-	23	-	-	1	<0.1	<0.1	-	<0.1	0.1	30	9.2	25	590	82	672	-
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.4	8	-	-	-	880
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.2	9	-	-	-	806
TA.	TEX-10-D	07/23/81	4.7	0.5	160	8	240	51.8	<1	<4	<1	<0.1	<0.1	<1	<0.1	0.1	-	9.2	18	-	-	-	750
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.0	7	-	-	-	650
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.5	6	-	-	-	700
TALLEY 2C	TEX-11-D	07/22/81	1.4	0.9	240	25	300	22.8	<1	<4	<1	<0.1	<0.1	<1	0.1	0.2	-	8.9	33	-	-	-	1025
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.7	5	-	-	-	900
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.6	6	-	-	-	900

Checklist GROUNDWATER MONITORING
(Attach to correct checklist)

Date 8-4,5-83

(Reg.)/Permit No. 30137

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: G.W. Monitoring Program Paragraph: item 1

Ground water monitoring has been installed for the following facilities: heavy organic basin, fly ash ponds 1 & 2, Talley 1A, wastewater treatment lagoons, special wastes landfill, and chromate settling basins

SECTION: G.W. Monitoring Program Paragraph: item 3

Please refer to technical reports - "Hydrogeologic Studies, Phases I & II" by Underground Resources Management, Inc. - for well depths, diameter, and completion logs. Well depths, diameters, and elevations for RCRA wells are also listed in TABLE II of the attached "Groundwater Sampling and Analysis Plan".

SECTION: G.W. Monitoring Program Paragraph: item 10

Future monitoring and reporting requirements should include wells 6-S, 7-S, and 11-S based on the following observations:

6S - As previously noted (Talley 1A comments), it is believed that this well is now updip of Talley 1A and the hydraulic influence of Mason Lake will "clear" the well of contamination. Additional, periodic monitoring of this well should be done to substantiate this contention. This well is grossly contaminated and contains many priority pollutants (see company and TDWR results - Attachment F).

cont. →

Checklist GROUNDWATER MONITORING
(Attach to correct checklist)

Date 8-4,5-83

Reg.?/Permit No. 30137

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: G.W. Monitoring Program Paragraph: item 10, cont.

If, in fact, this groundwater is seeping back into Talley 1A, then it may be appropriate to consider reclassification of Talley 1A to 1H.

7-S- This well is not included in the RCRA monitoring program because, in the Phase II report, it is judged to be uncontaminated. The location of this well is downdip of hazardous facilities - Lagoon 8 and, perhaps, Special Wastes

SECTION: Paragraph:

Landfill. The fact that it is not contaminated should not be the basis for its exclusion from monitoring.

11-S- This well is excluded from monitoring for the same reason as 7-S, above. 11-S is downdip of Lagoon 1 where hazardous wastes treated by the WWTS would be in greatest concentration. The WWTS lagoons are unlined, and current uncontamination does not ensure future uncontamination. The shallow aquifer

SECTION: Paragraph:

in this location is believed to be in contact with the deep aquifer monitored by well 3D. Flow from the shallow to the deep aquifer in this area is expected to dilute concentrations of contaminants below detection. However, should future corrective action for ground water contamination include modification to the WWTS lagoons, then data from 11-S would be needed to demonstrate the above phenomenon and its continued uncontamination.

cont.→

Checklist GROUNDWATER MONITOR
(Attach to correct checklist)

Date 8-4,5-83

Reg. Permit No. 30137

INDUSTRIAL SOLID WASTE

Compliance Monitoring Inspection Report

COMMENTS SHEET

SECTION: G.W. Montoring Program Paragraph: Item 10, cont.

The company is currently implementing their submitted, and approved, ground water quality assessment plan. It is recommended that the previous points be considered when evaluting the results of the assessment report

TMD

SECTION: _____ Paragraph: _____

SECTION: _____ Paragraph: _____

TABLE I

GROUNDWATER ANALYSIS PARAMETERS

Drinking Water Standards and Limits

1.	Arsenic	- 0.05 mg/l	12.	Lindane	- 0.004 mg/l
2.	Barium	- 1.0 mg/l	13.	Methoxychlor	- 0.1 mg/l
3.	Cadmium	- 0.01 mg/l	14.	Toxaphene	- 0.005 mg/l
4.	Chromium	- 0.05 mg/l	15.	2,4-D	- 0.1 mg/l
5.	Flouride	- 1.4-2.4 mg/l	16.	2,4,5-T	- 0.01 mg/l
6.	Lead	- 0.05 mg/l	17.	Radium	- 5 pci/l
7.	Mercury	- 0.002 mg/l	18.	Gross Alpha	- 15 pci/l
8.	Nitrate (as N)	- 10.0 mg/l	19.	Gross Beta	- 4 millirem/yr
9.	Selenium	- 0.01 mg/l	20.	Turbidity	- 1 TU
10.	Silver	- 0.05 mg/l	21.	Coliform Bacteria	- 1/100 ml
11.	Endrin	- 0.0002 mg/l			

Groundwater Quality

1. Chloride
2. Iron
3. Manganese
4. Phenols
5. Sodium
6. Sulfate

Groundwater Contamination (Indicator parameters)

1. pH
2. Specific Conductance
3. Total Organic Carbon
4. Total Organic Halogen

TABLE I

Facility	Location	Date Sampled	Ca	Mg	Na	K	HCO_3	Cl	NO_3	F	Ba	Co	Cu	Pb	Mn	Zn	PALK	pH	TOC	TDS	TSS	TS	SC
Talley 3	TEX-1-S	10/22/81	3	2	11	.2	-	11.1	-	-	1	<0.1	<0.1	-	0.6	<0.1	<1	5.1	45	110	26	136	-
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1	5	-	-	-	97
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	6	-	-	-	95
Talley 3	TEX-3-S	10/22/81	150	100	270	6.8	-	473	<3	-	2	0.3	<0.1	-	2.4	0.5	<1	3.8	30	2712	38	2750	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	18	-	-	-	2475
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.2	9	-	-	-	2388
Talley 2C	TEX-5-S	10/22/81	110	35	350	8.1	-	149	<3	-	2	<0.1	<0.1	-	2.2	0.1	<1	5.5	100	2106	32	2138	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	24	-	-	-	4400
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	20	-	-	-	4838
Talley 1A	TEX-6-S	10/22/81	160	100	2300	11.4	-	4500	<3	-	8	1.6	0.2	-	15.2	1.9	<1	3.8	6100	12048	92	12140	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1	5750	-	-	-	8700
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.7	4119	-	-	-	6938
Lagoon 8	TEX-7-S	10/22/81	40	2	44	18	-	26	<3	-	1	<0.1	<0.1	-	<0.1	<0.1	80	11.2	30	4138	44	4182	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.0	16	-	-	-	417
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	9	-	-	-	473
Lagoon 3 W	TEX-9-S	10/22/81	38	8	950	7.4	-	441	<3	-	2	<0.1	<0.1	-	4.6	<0.1	<1	6.4	130	2044	80	2124	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	94	-	-	-	2550
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	96	-	-	-	2650
Lagoon 1	TEX-11-S	10/22/81	62	6	40	9.5	-	73	3	-	1	<0.1	<0.1	-	0.3	<0.1	<1	6.4	20	360	40	400	-
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.0	9	-	-	-	550
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	8	-	-	-	556
		11/12/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	50	-	-	-	575
UPDIP	TEX-13-S	11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.0	8	-	-	-	1110
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6	10	-	-	-	1100
		11/12/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.2	7	-	-	-	1088
U P	TEX-14-S	10/22/81	255	65	112	7.3	-	27	<3	-	4	<0.1	<0.1	-	1.3	<0.1	<1	6.3	25	120	40	160	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	17	-	-	-	1700
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6	4	-	-	-	1700
CHROMATE BASINS	TEX-16-S	10/22/81	3	2	195	18.7	-	147	<3	-	1	<0.1	<0.1	-	<0.1	<0.1	260	10.5	17	302	28	330	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	15	-	-	-	1400
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0	7	-	-	-	1363
CHROMATE BASINS	TEX-17-S	10/22/81	205	16	375	12.7	-	462	<3	-	4	<0.1	<0.1	-	0.9	<0.1	<1	6.4	30	1642	56	1698	-
		11/03/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.3	21	-	-	-	2500
		11/11/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1	18	-	-	-	2613
HoB	TEX-18-S	10/22/81	65	35	220	18.4	-	54	<3	-	2	<0.1	<0.1	-	0.1	<0.1	<1	7.1	45	1942	28	1970	-
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3	59	-	-	-	1800
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	29	-	-	-	750
		11/12/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	20	-	-	-	813
HoB	TEX-19-S	10/22/81	4	9	41	18.9	-	10	<3	-	1	<0.1	<0.1	-	<0.1	<0.1	100	9.4	75	538	34	572	-
		11/02/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10.8	154	-	-	-	725
		11/10/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	43	-	-	-	613
		11/12/81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	60	-	-	-	644

All concentrations except pH and specific conductivity in mg/l.

January 3, 1983

NON-RCRA GROUNDWATER DATA

Well MW-1 (FA Pond #1)

	May, 1982	Aug, 1982	Nov, 1982
TOC	8	6	16
Conductivity	575	295	350
pH	7.2	7.4	7.6
Water level	278.36	276.36	276.36

Well MW-4 (FA Pond #2)

	May, 1982	Aug, 1982	Nov, 1982
TOC	53	5	15
Conductivity	455	460	450
pH	7.2	7.2	6.9
Water level	278.36	276.36	276.36

Water W-4 (Talley 1A)

	May, 1982	Aug, 1982	Nov, 1982
TOC	2325	3020	2700
Conductivity	4600	8000	6700
pH	5.2	5.1	4.9
Water level	229.00	231.77	227.00

Well W-7 (Talley 1A)

	May, 1982	Aug, 1982	Nov, 1982
TOC	725	650	390
Conductivity	4825	5000	4000
pH	5.8	5.7	6.0
Water level	239.00	240.20	237.00

Well W-10 (Talley 1A)

	May, 1982	Aug, 1982	Nov, 1982
TOC	58	72	165
Conductivity	1275	1400	1200
pH	6.4	6.6	6.4
Water level	229.00	244.09	238.00

TABLE II

GROUNDWATER WELL DATA

FACILITY	Well No.	Ground	Well Head	Well Depth	Well Bottom	Water Level
	2-D[1]	243.58	246.01	138'	105.58	
	3-D	260.50	263.05	106'	154.50	
	4-D	245.69	249.26	115'	130.69	
	6-D	262.40	265.41	168'	94.40	
	7-D	286.11	288.92	100'	186.11	
	8-D	293.68	296.61	124'	169.68	
	10-D	259.36	262.51	101'	158.36	
	11-D	250.92	254.06	130'	120.92	
	1-S[2]	250.71	253.39	18'	232.71	
	3-S	246.85	250.23	33'	213.85	
	5-S	250.92	254.49	38'	212.92	
	6-S	259.46	262.65	34'	225.46	
	7-S	245.48	248.91	33½'	211.98	
	9-S	255.33	257.94	18'	237.33	
	11-S	256.20	259.03	20'	236.20	
	13-S	286.41	289.81	22'-11"	263.49	
	14-S	282.19	283.45	28'-3"	253.94	
	16-S	292.38	293.87	38½'	253.88	
	17-S	294.08	297.38	23'-3"	270.83	
	18-S	286.97	290.10	36½'	250.47	
	19-S	285.87	287.07	38'	247.87	
	20-S	284.19	287.42	36'	248.18	
	22-S	261.61	264.80	15'	246.61	
	23-S	262.60	264.29	28'	234.60	
	24-S	261.90	264.99	33½'	228.40	
	25-S	261.20	264.33	33'-7"	227.62	

[1] Deep wells are made of 4" tubing, 2,450 ml/ft of volume

[2] Shallow wells are made of 2" tubing; 620 ml/ft of volume

TEXAS DEPARTMENT OF WATER RESOURCES TDWR 0849

NO. SW 01498 District 5 Org. No. 535 Work No. 9665 Lab TDH

Site Name Texas Eastman Company

Site Location Longview

County Harrison Basin Sabine

Method of Collection PVC bailer removed / well volume, allowed to recover

Point of Collection Well #6-S

Talley 2A-upd.p (TMD)

JUL 26 1982

Type facility: ☐ Drum; ☐ Tank; ☒ Impoundment; ☐ Landfill ☐ Waste pile; ☐ Landfarm; ☐ Other

Time Collected 2:05 (am) pm Date Shipped 7/23/82

Add. COC #s

ODOR; ☒ Yes; ☐ No; Describe sweet

S.W. Registration	Permit Number	Page No.	Sup	Date Mo.	Date Day	Date Yr.	Sup
1 8	10 18	19 21	22	23 24	25 26	27 28	29
3 0 1 3 7	0 0 4 7 1		B	0 7	2 3	8 2	M

Ann N. McKinley
(Collector's Signature)

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 01498 AUG 30 1982

District 5 Org. No. 535 Work No. 9665 Lab TDH

Material Sampled: ☐ Solid waste (W); ☐ Liquid waste (L); ☐ Soil (E); ☒ Well (M); ☐ Stream (S); ☐ Other (O)

Comments 202.

(continued on back)

Lab Only — Date rec'd JUL 26 1982; chkd AUG 26 '82; CE2-13107 (Lab No); Analyst sign.:

Preservation: ☐ None; ☒ Ice; ☐ H_2SO_4; ☐ HNO_3

Other

Auxiliary Tags

☐ LEACHATE: EP Toxicity Series: TDWR

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71
~~pH~~					
0 0 4 0 3					
~~COD~~					
0 0 3 4 0					
~~TOC~~					
0 0 6 8 0					
GC/MS Volatiles					
SEE ATTACHED SHEET					

AUG

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: Laboratory No.: Sample No.: SW 01428

Date Received: Delivered By: Condition of Seals:

Description of Sample:

From:

LABORATORY FINDINGS

Volatile Organic Analysis.

Chloroform ≐ 6500 ug/liter.

Other volatiles present

Unable to identify, possibly butyl esters (Approx concentration ≐ 3000 ug/liter)

AUG 26 '82
Date Reported

FORM NO. G-59

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 01499

District 5 Org. No. 535 Work No. 9965 Lab TDH

Site Name Texas Eastman Company

Point of Collection Well #6-S

Site Location Longview

Talley 1A - upd.p (TMD)

JUL 28 1982

County Harrison Basin Sabine

Type facility: ☐ Drum; ☐ Tank; ☒ Impoundment; ☐ Landfill; ☐ Waste pile; ☐ Landfarm; ☐ Other

Method of Collection PVC bailer

removed 1 well volume, allowed well to recover

Time Collected 2:05 (am) pm Date Shipped 7/23/82

Add. COC #s

ODOR: ☒ Yes; ☐ No; Describe

S.W. Registration	Permit Number	Page No.	Num	Date Mo.	Date Day	Date Yr.	Num
1 9	10 18	19 21	22	23 24	25 26	27 28	29
3 0 1 3 7	0 0 4 7 1		B	0 7	2 3	8 2	M

Ann N. McKinley
(Collector's Signature)

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. ~~SW~~ 01499

District 5 Org. No. 535 Work No. 9965 Lab TDH

Material Sampled: ☐ Solid waste (W); ☐ Liquid waste (L); ☐ Soil (E); ☒ Well (M); ☐ Stream (S); ☐ Other (O)

Comments

(continued on back)

Lab Only — Date rec'd: JUL 26 1982 cmplt: SEP 21 '82 CE2-13113

Analyst sign.:

Preservation: ☐ None; ☒ Ice; ☐ H_2SO_4; ☐ HNO_3

Other

Auxiliary Tags

☐ LEACHATE: ___ EP Toxicity Series; ___ TDWR

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71
~~00~~					
0 0 4 0 3					
~~000~~					
0 0 3 4 0					
~~500~~					
0 0 6 8 0					
GC/MS scan					
SEE ATTACHED SHEET					

SEP 27 1982

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: **Laboratory No.:** CE2-13113 **Sample No.:** SW 01499

Date Received: 26 JULY 82 **Delivered By:** TRUCK **Condition of Seals:** INTACT

Description of Sample:

From:

LABORATORY FINDINGS

Analysis by GC/MS.

No EPA acid or base/neutral extractable priority pollutants detected.

Sample contains a very complex mixture of organic compounds at. Unable to identify positively, but it appears to be a mixture of various 1,3 diols and ethylene glycol ethers.

Benzoic acid detected. (a major constituent)

Other organic compounds present, unable to identify.

Concentrations range with respect to diol constituents appears to be up to 20 mg/liter.

SEP 21 '82

Date Reported

FORM NO. G-59

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 02303

District 5 Org. No. 537 Work No. 9068 Lab TDH

Site Name Texas Eastman Company

Site Location Longview

County Harrison Basin Sabine

Method of Collection PVC Bailer

Point of Collection Ford Bottom

Talley 1A (TMD)

JUL 26 1982

Type facility: ☐ Drum; ☐ Tank; ☒ Impoundment; ☐ Landfill; ☐ Waste pile; ☐ Landfarm; ☐ Other

Time Collected 1115 (am) pm Date Shipped 7/23/82

Add. COC #s

ODOR; ☐ Yes; ☒ No; Describe

S.W. Registration	Permit Number	Page No.	Date Mo.	Date Day	Date Yr.
1 9	10 18	19 21	23 24	25 26	27 28
30137	C0471V		07	23	82

(Collector's Signature)

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

SEP 27 1982

NO. SW 02303

District 5 Org. No. 537 Work No. 9068 Lab TDH

Material Sampled: ☐ Solid waste (W); ☐ Liquid waste (L); ☒ Soil (E); ☐ Well (M); ☐ Stream (S); ☐ Other (O)

Comments

1 qt.

(continued on back)

Lab Only — Date rec'd JUL 26 1982; Date emb. SEP 21 '82

CE2-13105

Analyst sign.:

Preservation: ☒ None; ☐ Ice; ☐ H_2SO_4; ☐ HNO_3

Other

Auxiliary Tags

☐ LEACHATE: EP Toxicity Series ☒ TDWR

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71
~~pH~~					
00403					
~~COD~~					
00340					
~~TOC~~					
00680					
GC/MS	Scan				

SEP 27 1982

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: **Laboratory No.:** CE2-13105 **Sample No.:** SW02303

Date Received: 26 JULY 82 **Delivered By:** TDWR **Condition of Seals:** INTACT

Description of Sample: SOIL

From: GC/MS Analysis

LABORATORY FINDINGS

Analysis by GC/MS of soxhlet extract.

TRACE OF THE FOLLOWING EPA priority pollutants.

Phenol < 1 mg/kg.

4-NITROPHENOL < 1mg/kg.

Polynuclear aromatic hydrocarbons < 1mg/kg each.

Sample contains a very complex mixture of organic compounds.

Alkyl benzenes (C_2, C_3)

2-Ethyl hexanoic acid.

Unable to positively identify the majority of the compounds present, but mass spectral comparisons with library spectra suggest alkyl 1,3 diols and other diols. Possibly some ethers (high mol wt) present also

Concentration range of these unknown compounds with respect to d_{10}-anthracene is up to 20 mg/kg.

SEP 21 '82

Date Reported

FORM NO. G-59

TEXAS DEPARTMENT OF WATER RESOURCES TDWR 0849

NO. SW 01492

District 5 Org. No. 537 Work No. 9068 Lab TDH

Site Name Texas Eastman Company

Point of Collection Well 19-S

Site Location Longview

JUL 26 1982

Heavy Organics Basin GWD

County Harrison Basin Sabine

Method of Collection PVC bailer

Type facility: ☐ Drum; ☐ Tank; ☒ Impoundment; ☐ Landfill ☐ Waste pile; ☐ Landfarm; ☐ Other

removed 1 well volume allowed to recover

Time Collected 2:45 (am/pm) Date Shipped 7/23/82

Add. COC #s

ODOR; ☒ Yes; ☐ No; Describe very faint

S.W. Registration (1–9)	Permit Number (10–18)	Page No. (19–21)	(22)	Date Mo. (23–24)	Day (25–26)	Yr. (27–28)	(29)
30137	00471		8	07	23	82	M

Ann M. McGinley
(Collector's Signature)

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

AUG 30 1982

NO. SW 01492

District 5 Org. No. 537 Work No. 9068 Lab TDH

Lab Only — Date: recd JUL 26 1982; cmp AUG 26 '82

CE2-13108

Analyst sign.:

Material Sampled: ☐ Solid waste (W); ☐ Liquid waste (L); ☐ Soil (E); ☒ Well (M); ☐ Stream (S); ☐ Other (O)

Comments

Preservation: ☐ None; ☒ Ice; ☐ H_2SO_4; ☐ HNO_3

Other

Auxiliary Tags

JD.

(continued on back)

☐ LEACHATE: __ EP Toxicity Series: __ TDWR

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71
~~pH~~					
00403					
~~COD~~					
00340					
~~TOC~~					
00680					
GC/MS	volatiles				
SEE ATTACHED SHEET.					

AUG 30 1982

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: Laboratory No.: CE2-13108 Sample No.: SW-01492

Date Received: 26 JUNE 82 Delivered By: TDH&R Condition of Seals: INTACT

Description of Sample: WATER

From: GC/MS ANALYSIS

LABORATORY FINDINGS

Volatile Organic Analysis

Benzene ≅ 220 ug / liter.

Ethyl benzene ≅ 40 ug / liter.

Toluene (trace) ≅ < 10 ug / liter

Other organics detected but not quantitated.

Naphthalene.

Methyl naphthalenes

Dimethyl naphthalene

Indan

Indene

Methyl - Indene

Acenaphthene

Acenaphthylene

9H- Fluorene

AUG 26 '82

Date Reported

FORM NO. G-59

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 01493 District 5 Org. No. 537 Work No. 9068 Lab TDH

Site Name Texas Eastman Company

Site Location Longview

County Harrison Basin Sabine

Method of Collection PVC bailer
remove 1 well volume
allowed to recover

Point of Collection Well 19-S
Heavy Organic Basin (TMD)
JUL 26 1982

Type facility: ☐ Drum; ☐ Tank; ☒ Impoundment; ☐ Landfill
☐ Waste pile; ☐ Landfarm; ☐ Other

Time Collected 2145 (am, pm) Date Shipped 7/23/82

Add. COC #s

ODOR; ☒ Yes; ☐ No; Describe very faint

S.W. Registration	Permit Number	Page No.	Card Type	Date Mo.	Date Day	Date Yr.	Sort Key
1 9	10 18	19 21	22	23 24	25 26	27 28	29
3037	0047V		B	07	23	82	M

Ann N. McBride
(Collector's Signature)

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 01493

District 5 Org. No. 537 Work No. 9068 Lab TDH

Material Sampled: ☐ Solid waste (W); ☐ Liquid waste (L); ☐ Soil (E); ☒ Well (M);
☐ Stream (S); ☐ Other (O)

Comments

(continued on back)

Lab Only — Date rec JUL 26 1982 cmp AUG 17 '82 — CE2-13110

Analyst sign.:

Preservation: ☐ None; ☒ Ice; ☐ H_2SO_4; ☐ HNO_3
Other

Auxiliary Tags
☐ LEACHATE: ___ EP Toxicity Series; ___ TDWR

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71
~~pH~~					
00403					
~~COD~~					
00340					
~~TOC~~					
00680					
GC/MS	scan				
	SEE ATTACHED SHEET				

RECEIVED
OCT 04 1982
DEPT. OF WATER RESOURCES DISTRICT 5

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: **Laboratory No.:** CE2-13110 **Sample No.:** SW-Q149

Date Received: 26 JULY 82 **Delivered By:** TDWR **Condition of Seals:** INTAC

Description of Sample: Well

From: GC/MS Analysis

LABORATORY FINDINGS

Analysis by GC/MS

No Acid extractable priority pollutants detected.

Base/Neutral extractables.

Naphthalene ≐ 200 ug/liter
Acenaphthene ≐ <10 ug/liter
Acenaphthylene ≐ 15 ug/liter
Fluorene ≐ 10 ug/liter
Phenanthrene ≐ <10 ug/liter.

Other organic compounds present at levels above 200 ug/liter.

Neopentyl glycol.

Mixed poly glycol ethers; appears to be a mixture of low molecular glycol ethers, mainly polyethylene glycols with probable incorporation of neopentyl glycol in chemical structure. Unable to give positive identification.

Methyl naphthalenes present.

RECEIVED
OCT 04 1982
DEPT. OF
WATER RESOURCES
DISTRICT 5

AUG 17 '82
Date Reported

FORM NO. G-59

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 01494 District 5 Org. No. 537 Work No. 9068 Lab TDH

Site Name Texas Eastman Company Point of Collection Well 9-S

Site Location Longview WWTS - Oxidation Pond #3 (TMD)

JUL 28 1982

County Harrison Basin Sabine

Method of Collection PVC bailer

rinsed / well volume

allowed to recover

Type facility: ☐ Drum; ☐ Tank; ☒ Impoundment; ☐ Landfill
☐ Waste pile; ☐ Landfarm; ☐ Other

Time Collected 2:25 (am) (pm) Date Shipped 7/23/82

Add. COC #s

ODOR; ☐ Yes; ☐ No; Describe

S.W. Registration	Permit Number	Page No.	Date Mo.	Day	Yr.
1 9	10 18	19 21	22 23 24	25 26	27 28 29
3 0 1 3 7	C 0 4 7 1		B 0 7	2 3	8 2

(Collector's Signature)

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 01494 AUG 30 1982

District 5 Org. No. 537 Work No. 9068 Lab TDH

Material Sampled: ☐ Solid waste (W); ☐ Liquid waste (L); ☐ Soil (E); ☒ Well (M);
☐ Stream (S); ☐ Other (O)

Comments

202.

(continued on back)

Lab Only — Date rec'd: JUL 26 1982 CE2-13106
completed: AUG 26 '82
Analyst sign.:

Preservation: ☐ None; ☒ Ice; ☐ H_2SO_4; ☐ HNO_3
Other
Auxiliary Tags
☐ LEACHATE: ___ EP Toxicity Series; ___ TDWR

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71
~~pH~~					
0 0 4 0 3					
~~COD~~					
0 0 3 4 0					
~~TOC~~					
0 0 6 8 0					
GC/MS	Volatiles				
	SEE ATTACHED LIST				

AUG 30 1982

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: Laboratory No.: CE2-13106 Sample No.: # SW-01494

Date Received: 26 JULY 82 Delivered By: TDWR Condition of Seals: INTACT

Description of Sample: WATER FOR PURGE & TRAP

From: GC/MS ANALYSIS

LABORATORY FINDINGS

Volatile Organic Analysis

Benzene ≐ 1800 ug/liter

Ethyl Benzene ≐ 1700 ug/liter

Other organics detected but not quantitated.

Naphthalene

Methyl Naphthalene

INDAN (could also be PROPENYL - BENZENE)

INDENE

METHYL - INDENE

ACENAPHTHENE

AUG 26 '82

Date Reported

FORM NO. G-59

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 01495 District 5 Org. No. 535 Work No. 9665 Lab TDH

Site Name Texas Eastman Company Point of Collection Well 9-S

Site Location Longview WWTS: Oxidation Pond #3 (TMD)

JUL 26 1982

County Harrison Basin Sabine

Method of Collection PVC bailer
Purge 1 well volume
allowed to recover

Type facility: ☐ Drum; ☐ Tank; ☒ Impoundment; ☐ Landfill
☐ Waste pile; ☐ Landfarm; ☐ Other

Time Collected 9:25 (am) pm Date Shipped 7/23/82

Add. COC #s

ODOR; ☒ Yes; ☐ No; Describe

S.W. Registration	Permit Number	Page No.	Date Mo.	Date Day	Date Yr.	
1 9	10 18	19 21	22 23 24	25 26	27 28	29
3 0 1 3 7	0 0 4 7 1		8 0 7 2 3	5 2		M

Chas N McGinley
(Collector's Signature)

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71

TEXAS DEPARTMENT OF WATER RESOURCES TDWR-0849

NO. SW 01495 SEP 27 1982

District 5 Org. No. 535 Work No. 9665 Lab TDH

Material Sampled: ☐ Solid waste (W); ☐ Liquid waste (L); ☐ Soil (E); ☒ Well (M);
☐ Stream (S); ☐ Other (O)

Comments

(continued on back)

Lab Only — Date received: JUL 26 1982 CE2-13112
Date entered: SEP 21 '82
Analyst sign.:

Preservation: ☐ None; ☒ Ice; ☐ H_2SO_4; ☐ HNO_3
Other
Auxiliary Tags
☐ LEACHATE: EP Toxicity Series; TDWR

30 Code	35 Parameter Value	44 Code	49 Parameter Value	58 Code	63 Parameter Value 71
~~alt~~					
0 0 4 0 3					
~~COD~~					
0 0 3 4 0					
~~TOC~~					
0 0 6 8 0					
GC/MS scan					
SEE THE ATTACHED SHEET.					

RECEIVED
SEP 30 1982
DEPT. OF
WATER RESOURCES
DISTRICT 5

SEP 27 1982

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: Laboratory No.: CE 2-13112 Sample No.: SW # 149

Date Received: 26 July 82 **Delivered By:** TDWR **Condition of Seals:** INTACT

Description of Sample: well water.

From: GC/MS Analysis

LABORATORY FINDINGS

Analysis by GC/MS

I. Priority pollutant scan.
ACID EXTRACTABLES DETECTED
Phenol < 10 ug/liter
2,4 dimethyl phenol < 10 ug/liter
BASE/NEUTRAL EXTRACTABLES DETECTED.
Polynuclear Aromatic Hydrocarbons present
Naphthalene ≈ 370 ug/liter
Acenaphthylene ≈ 15 ug/liter
Acenaphthene ≈ <10 ug/liter.
Fluorene ≈ <10 ug/liter
Phenanthrene ≈ <10 ug/liter
Anthracene ≈ <10 ug/liter
Pyrene ≈ <10 ug/liter,

II. Many other organic compounds present (main constituents)
Alkyl benzenes. (C_2, C_3, C_4
Methyl naphthalenes.
Biphenyl
Unable to positively identify the majority of the compounds present, but mass spectral comparisons with library spectra suggest alkyl diols and some alkyl ethers. Concentration range of the unknown compounds with respect to d10-anthracene is up to 3 mg/liter

SEP 21 '82
Date Reported

FORM NO. G-59

PERMIT NO. HW-50043-000

EPA I.D. No. TXD 007330202

TEXAS WATER COMMISSION
Stephen F. Austin State Office Building
Austin, Texas

PERMIT FOR INDUSTRIAL SOLID WASTE MANAGEMENT SITE
issued under provisions of TEX. REV. CIV. STAT. ANN. art. 4477-7 and Chapter 26 of the Texas Water Code

Name of Permittee: Texas Eastman Company
Division of Eastman Kodak
P. O. Box 7444
Longview, Texas 75607

X-Ref SA Vol I

Site Owner: Texas Eastman Company
Division of Eastman Kodak
P. O. Box 7444
Longview, Texas 75607

Classification of Site: Hazardous Waste Storage and Processing, Non-commercial

The permittee is authorized to store and process wastes in accordance with limitations, requirements and other conditions set forth herein. This permit is granted subject to the rules of the Department and other Orders of the Commission and laws of the State of Texas. Nothing in this permit exempts the permittee from compliance with the applicable rules and regulations of the Texas Air Control Board.

This permit will be valid until cancelled, amended or revoked by the Commission except that the authorization to store and process wastes shall expire midnight, 10 years after the date of permit approval.

APPROVED, ISSUED, AND EFFECTIVE this 15th day of May, 19 84.

ATTEST: Mary Ann Hefner Paul Hopkins
For the Commission

NAME: Texas Eastman Company

I. Size and Location of Site

A. The industrial solid waste management facility is located on a tract of land four miles southeast of the City of Longview on State Highway 149 south of Interstate 20 and north of the Sabine River in Harrison and Gregg Counties, Texas. The property is owned by Texas Eastman Company. The location is in the watershed area of Segment 505 of the Sabine River Basin (North Latitude 32°26'17", West Longitude 94°41'24").

B. The legal description of the entire site, dated July 11, 1983 submitted as part of the Permit No. HW-50043 application, is hereby made a part of this permit.

II. Facilities and Operations Authorized

A. Wastes Authorized:

The permittee is authorized to manage industrial solid wastes listed in the application as described herein.

Wastes are those generated from plant sources and off-site sources. Wastes from off-site sources are limited to those generated as a result of manufacturing activities at affiliates of the permittee.

Hazardous wastes are limited to those within the Hazard Code Groups indicated below:

1. Hazard Code Groups (as prescribed by the U.S. Environmental Protection Agency regulations in effect upon the date of permit approval):

x	Ignitable (I)	x	Acute Hazardous Waste
x	Toxic (T)	x	EP Toxic (E)
x	Corrosive (C)	x	Reactive (R)

2.

Waste Descriptions	TDWR Waste Class	Hazard Code(s)
a. Organic process wastes	I,II	I,T,E,R,C
b. Heavy organics basin sludge	I	I,T,E,R
c. Off-spec and discarded commercial chemical products and reaction intermediates	I	I,T,E,C,R,H
d. Lab wastes	I	I,T,E,C,R,H
e. Waste treatment residues and sludges	I	I,T,E,C,H
f. Filter elements	I,II	I,T,E
g. Resins	I	T,E,
h. Filter coals	I	T,E
i. Spent solvents	I	I,T,E
j. Waste oils	I,II	I,E
k. Miscellaneous plant trash	II	
l. Contaminated storm water	I	I,T,E

NAME: Texas Eastman Company

3. Prohibited Wastes and Waste Limitations

Wastes authorized for disposal by incineration shall contain no greater than 100 parts per million of any hazardous constituent which is listed in 40 CFR Part 261, Appendix VIII and which has a heat of combustion of less than 1,350 BTU/pound (0.75 kilo-calories/gram).

B. Facilities and Functions Authorized:

The permittee is authorized to operate the following facility units and perform the following functions for storage and/or processing, subject to the limitations described below. All waste management activities are to be confined to authorized facility units:

1. Container storage area, covered, enclosed, maximum capacity 600 55-gallon drums with a total capacity of 33,000 gallons for storage of solid wastes and sludges only;

2. Tank, closed, maximum capacity 13,540 gallons, steel, above-grade, identified as Tank T1 in the application, for storage and processing of all liquid wastes authorized for incineration;

3. Tank, closed, maximum capacity 13,540 gallons, steel, above-grade, identified as Tank T2 in the application, for storage and processing of all liquid wastes authorized for incineration;

4. Tank, closed, maximum capacity 13,540 gallons, steel, above-grade, identified as Tank T3 in the application, for storage and processing of all liquid wastes authorized for incineration;

5. Tank, closed, maximum capacity 13,540 gallons, steel, above-grade, identified as Tank T4 in the application, for storage and processing of all liquid wastes for incineration;

6. Tank, closed, maximum capacity 4,525 gallons, steel, above-grade, identified as Tank T5 in the application, for storage and processing of all authorized wastes;

7. Tank, closed, maximum capacity 4,525 gallons, steel, above-grade, identified as Tank T6 in the application, for storage and processing of all authorized wastes;

8. Tank, closed, maximum capacity 4,525 gallons, steel, above-grade, identified as Tank T7 in the application, for storage and processing of all wastes for incineration;

9. Tank, closed, maximum capacity 4,525 gallons, steel, above-grade, identified as Tank T8 in the application, for storage and processing of all wastes authorized for incineration;

10. Tank, closed, maximum capacity 11,750 gallons, steel, above-grade, identified as Tank T12 in the application, for the storage and processing of sludges; and

11. Tank, closed, maximum capacity 10,150 gallons, steel, above-grade, identified as Tank T21 in the application, for the storage and processing of slurries; and

12. Incinerator, rotary kiln with secondary combustion chamber, maximum rated heat input 95 million BTUs per hour for processing of all authorized wastes.

C. Authorization to continue industrial solid waste operations at this facility is contingent upon maintenance of financial assurance pursuant to Provision IV.A.

D. The facility components and operational methods authorized are limited to those described herein and by the application and related plans and specifications. All facility components and operational methods are subject to the terms and conditions of this permit and TDWR Rules. Prior to constructing or operating any facility component in a manner which differs from the related plans and specifications, the permittee is required to:

1. Notify the TDWR and submit plans and specifications for the proposed modifications;

2. Receive written authorization from the Executive Director.

E. Any proposed facility modification, addition of components, or expansion in capacity which has not been addressed by the terms of this permit must be authorized in accordance with TDWR amendment rules.

III. Facilities Design, Construction and Operation

A. Facility design, construction, and operation must comply with this permit and TDWR rules. All plans and specifications for design and operation submitted with the application are approved, subject to the terms of this permit and any other orders of the Texas Water Commission. All monitoring and pollution control equipment shall be as specified in the application or an equivalent approved by the Executive Director of the TDWR.

B. The entire waste management facility shall be designed, constructed, operated, and maintained to prevent inundation of and discharges from the areas surrounding the facility components, subject to the following requirements:

1. The tank storage areas for liquid wastes shall be diked to contain potential spills and incident precipitation. The containment areas shall be sufficiently impervious to contain leaks, spills, or precipitation until the collected material is removed. The capacity of the diked tank areas shall be sufficient to contain the 25-year, 24-hour rainfall event (8.0 in.) plus the volume of the largest tank;

2. Collected spills, leaks, clean-up residues, and contaminated rainfall runoff (see Provision III.B.3.) shall be removed promptly after the spillage and/or rainfall event and shall be removed in as timely a manner as is necessary to prevent overflow of the collection system, by one of the following methods:

   a. Removal to an authorized facility component; or

   b. Removal off-site for processing and/or disposal at an authorized industrial solid waste management facility;

3. Contaminated rainfall runoff is defined as storm water, representative samples of which:

   a. Exceed concentrations of 55 mg/l organic carbon or 15 mg/l oil and grease; or

   b. Exhibit any of the characteristics of hazardous waste identified in 40 CFR 261, Subpart C; and

4. All loading and unloading areas and storage areas for non-liquid wastes shall be equipped with a drainage system connecting to process sewers and thence to authorized facility components.

C. The minimum shell thicknesses specified below shall be maintained at all times. The wastes contained in the tanks shall not exceed any maximum operating volume specified below:

Tank (Provision II.B.No.)	Minimum Shell Thickness (inch)	Maximum Operating Volume (gallons)
2	0.19	13,540
3	0.19	13,540
4	0.19	13,540
5	0.19	13,540
6	0.19	4,525
7	0.19	4,525
8	0.19	4,525
9	0.19	4,525
10	0.19	11,750
11	0.19	10,150

D. All pumps, fire- and spill-control equipment, decontamination equipment, air pollution control and monitoring equipment, and all other equipment and structures authorized or required by this permit shall be maintained in good functional condition.

E. The permittee shall construct and maintain the incinerator so that, when operated in accordance with the operating conditions specified in this permit it will meet the following performance standards:

1. The incinerator shall achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated in this permit for each waste feed;

2. The permittee shall control hydrogen chloride (HCl) emissions such that the rate of emissions is no greater than 1% of the HCl in the stack gas prior to entering any pollution control equipment, or 4.0 pounds per hour, whichever is larger; and

3. The incinerator shall not emit particulate matter in excess of 0.08 grains per dry standard cubic feet when corrected for the amount of oxygen in the stack gas.

F. Except as specified in Provision III.Q., the permittee shall feed hazardous wastes to the incinerator only under the following conditions:

1. The temperature in the fourth subchamber of the secondary combustion chamber shall be maintained at a minimum 1650^{0}F. This temperature shall be monitored and recorded continuously;

2. The maximum volumetric flow rate through the system shall not exceed 60,000 actual cubic feet per minute (acfm) at 14.9 psia and 60^{0}F. The volumetric flow rate shall be measured on a continuous basis by an annubar located in the stack, and shall be continuously recorded;

3. Stack gas concentration of carbon monoxide (CO), measured as specified in Attachment A, shall not exceed 350 ppm for any consecutive 15-minute averaging period. The CO concentration in the stack shall be monitored and recorded continuously;

4. The tandem free jet scrubber shall be operated at a minimum pressure differential of twenty-five (25) inches water column (WC) and shall be monitored and recorded on a continuous basis; and

5. The incinerator is operating at steady state, and is not in start-up and shut-down modes.

G. The permittee shall maintain and operate a waste feed cut-off system. This system must automatically cut off the incinerator feed under any of the following conditions:

1. When the operating conditions deviate from those specified in Provision III.F.; or

2. Upon:

   a. Loss of primary combustion air;

   b. Loss of fire in secondary combustion chamber burner;

   c. Power outage; or

   d. Shutdown of I.D. fan; or

3. When:

   a. Stub stack is open or the stub stack selector switch is in the manual position; or

   b. The flue gas cleaning system is bypassed.

H. All hazardous waste feed shall be cut off when:

1. Any of the monitoring equipment required by Provision III.I. is not operating properly;

2. There is a loss of atomizing air pressure to liquid burners or sludge nozzle; or

3. The oxygen (O_2) concentration measured in the secondary combustion chamber falls below four (4) percent by volume dry basis.

I. The permittee shall operate and maintain the monitoring systems as indicated in Attachment A.

J. Upon request of the Executive Director of TDWR, the permittee shall conduct sampling and analysis of the waste and exhaust emissions to verify that the operating requirements specified in Provision III.F. are adequate to meet the performance standards of Provision III.E.

K. Waste feed to the incinerator shall be subject to the following requirements:

1. The total feed rate, including the waste feed rate and auxiliary fuel, to the kiln is limited to a maximum of sixty (60) million BTU/hr. heat input;

2. The feed rate of all pumpable or gaseous materials, including waste feed and auxiliary fuel, must be monitored and recorded on a continuous basis;

3. The feed rate of nonpumpable materials must be monitored and logged on a periodic basis not to exceed the charging cycle or fifteen (15) minutes, whichever is greater, except when such feed is discontinued, in which case such discontinuances shall be noted in the operating record;

4. Only natural gas or propane may be injected into the secondary combustion chamber;

5. The waste feed injection rate of liquids into the rotary kiln shall not exceed 12,000 pounds per hour;

6. The waste feed injection rate of sludges and slurries into the rotary kiln shall not exceed 6,000 pounds per hour;

7. The waste feed injection rate of solids into the rotary kiln shall not exceed 5,400 pounds per hour;

8. The total chlorine content of the materials fed to the incinerator may not exceed 500 pounds per hour;

9. The total average heat value of the waste material and natural gas fired in the incinerator shall not be less than 5,000 BTU per pound of waste material injected into the kiln; and

10. The permittee shall perform sampling and analysis as necessary to ensure that the requirements of this provision are met.

L. The permittee shall control fugitive emissions from the combustion zone of the incinerator by maintaining a combustion zone pressure less than atmospheric pressure.

M. The principal organic hazardous constituents (POHCs) are: toluene, naphthalene, chloroform, chlorobenzene and benzene.

N. The permittee shall conduct a trial burn on the incinerator to verify that the incinerator is able, under the operating conditions specified in this permit, to achieve the performance standards required under Provision III.E.

O. After evaluation of the results of the trial burn the Executive Director may propose changes in the operating requirements of the permit by minor permit amendment.

P. During the pre-trial burn period (the period beginning with the initial introduction of hazardous wastes into the incinerator and ending with the start of the trial burn) the permittee may burn hazardous wastes, as authorized by this permit, for up to 720 hours of operation. The Texas Water Commission may grant an extension of up to 720 additional hours by minor permit amendment when good cause is demonstrated by the permittee.

Q. The permittee shall conduct the trial burn required by Provision III.N. in accordance with the trial burn plan submitted as part of this application, subject to the following requirements:

1. The trial POHCs for which performance standards shall be demonstrated are:

Waste Feed	POHC(s)
Waste Combination No. 1	Toluene, benzene and naphthalene
Waste Combination No. 2	Chloroform, chlorobenzene, and toluene.

2. The minimum temperature in the secondary combustion chamber shall be no less than 1,400°F at all times that hazardous materials are being fed to the kiln. The waste feed shall be automatically cut off if the temperature in the fourth subchamber falls below this level;

3. During the trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

   a. A quantitative analysis of the trial POHCs in the waste feed to the incinerator;

   b. A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, oxygen (O_2) and hydrogen chloride (HCl);

   c. A quantitative analysis of the scrubber water, ash residues, and other residues, for the purpose of estimating the fate of the trial POHCs;

   d. A computation of destruction and removal efficiency (DRE);

   e. If the HCl emission rate exceeds 1.8 kilograms of HCl per hour (4 pounds per hour), a computation of HCl removal efficiency;

   f. A computation of particulate emissions;

   g. An identification of sources of fugitive emissions and their means of control;

   h. A measurement of average, maximum, and minimum temperatures and combustion gas velocity; and

   i. A continuous measurement of carbon monoxide (CO) in the exhaust gas; and

4. The permittee shall submit to the Executive Director a copy of all data collected during the trial burn upon completion of the burn;

5. Within 90 days of the completion of the trial burn the permittee shall submit:

   a. The results of all determinations required pursuant to Provision III.Q.3.; and

   b. A certification that the trial burn has been carried out in accordance with the approved trial burn plan; and

6. All submissions required by Provision III.Q.5. must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application.

R. During the post trial burn period (the period starting immediately following the completion of the trial burn and ending with the specification of the permit operating conditions), the permittee may continue to feed wastes to the incinerator subject to the following conditions:

1. That the incinerator meet all operating requirements of this permit;

2. If, based upon the analytical results of the trial burn, the permittee determines that the incinerator failed to achieve any of the performance standards specified in Provision III.E., the permittee shall notify the Executive Director within twenty-four (24) hours of the determination, and the incinerator shall not burn hazardous waste. The permittee may apply to the Executive Director for a permit amendment and for a new trial burn pursuant to the rules of the Texas Water Commission and the TDWR; and

3. If the certification and information required by Provision III.Q.4. and 5. is not submitted within ninety (90) days after the trial burn, the incinerator shall cease to burn hazardous waste.

S. All calculations for the determination of compliance with performance standards shall be as specified in 40 CFR Part 264, Subpart O.

T. The permittee shall operate and maintain an oxygen (O_2) system as indicated in the application to satisfy the requirements of Provision III.H.3. In the event of failure of the secondary combustion chamber monitor, the kiln monitor may be used. The results required pursuant to Provision III.Q.3.b. shall include data from both monitors.

U. The applicant shall notify the Executive Director of TDWR in writing at least thirty (30) days prior to the start of the trial burn.

V. The permittee shall keep a written operating record as described in 40 CFR Part 264.73. In addition to the specific requirements of this paragraph, the permittee shall also record:

1. All occasions when the operating parameters specified in Provision III.F. are exceeded and/or the automatic waste feed cut-off is activated; and

2. All occasions when waste feed is cut off pursuant to Provision III.H. and/or the minimum oxygen level specified in Provision III.H.3. is not maintained.

At a minimum, the permittee shall record:

a) The date and time of the incident; and

b) The reason for waste feed cut-off and, if applicable, the concentrations triggering cut-off.

W. The permittee shall perform the following:

1. The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions, and signs of tampering; and

2. The emergency waste feed cutoff system and associated alarms must be tested at least monthly to verify operability.

IV. Closure

A. The permittee shall provide financial assurance in a form acceptable to the Executive Director of the TDWR in an amount not less than $499,000. Financial assurance shall be secured and maintained in compliance with 31 TAC Section 335.452, incorporating by reference 40 CFR Part 264 Subpart H.

B. The permittee shall submit to the Executive Director upon request such information as may be necessary to determine the adequacy of financial assurance.

C. Facility closure shall commence:

1. Upon direction of the Texas Water Commission or the Executive Director for violation of the permit, TDWR Rules, State Statues; or

2. Upon suspension, cancellation or revocation of the terms and conditions of this permit concerning the authorization to receive store and process waste materials; or

3. Upon abandonment of the site for more than 90 days; or

4. Upon direction of the Executive Director for failure to secure and maintain an adequate bond or other financial assurance as required in Provision IV.A.; or

5. When necessary to comply with Provision IV.D.

D. Facility closure shall be completed in accordance with the requirements of 31 TAC 335.452 and 40 CFR Part 264 Subpart G and the approved closure plan which is incorporated herein by reference.

E. Upon completion of closure, the permittee must submit to the Executive Director certification by both the permittee and an independent registered professional engineer that the facility has been closed in accordance with the approved closure plan.

V. Standard Permit Conditions

A. The permittee has a duty to comply with all conditions of this permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Solid Waste Disposal Act, and is grounds for enforcement action, for permit amendment, revocation or suspension, or for denial of a permit renewal or application.

B. In order to continue a permitted activity after the expiration date of the permit, the permittee must apply for a new permit or renewal. Authorization to continue such activity will terminate upon the effective denial of said application.

C. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

D. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

E. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit.

F. The permittee shall furnish to the Executive Director, within a reasonable time, any relevant information which the Executive Director may request to determine whether cause exists for amending, revoking,

suspending, or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by this permit.

G. The permittee shall give notice to the Executive Director prior to physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements.

H. Written approval from the Executive Director is required before beginning any change in the permitted facility or activity that would result in noncompliance with other permit requirements.

I. Unless specified otherwise, the permittee shall report any noncompliance which may endanger health or the environment. Report of such information shall be provided orally within 24 hours from the time the permittee becomes aware of the noncompliance. A written submission of such information shall also be provided within 5 working days of the time the permittee becomes aware of the noncompliance, except as provided by Provision V.W. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and, steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

J. Inspection and entry shall be allowed as prescribed in Texas Water Code, Chapter 26 and Chapter 27, and Section 7 of the Solid Waste Disposal Act, as applicable.

K. 1. Monitoring samples and measurements shall be representative of the monitored activity.

2. Monitoring and reporting records, including strip charts and records of calibration and maintenance, shall be retained for a period of three (3) years from the date of the record or report. This period may be extended by request of the Executive Director.

3. Records of monitoring activities shall include the following:

a. date, time and place of sample or measurement;

b. individual who collected the sample or made the measurement;

c. date of analysis;

d. the individual who made the analysis;

e. the technique or method of analysis; and

f. the results of the analysis.

L. Any noncompliance other than that specified above, or any required information not submitted or submitted incorrectly, shall be reported to the Executive Director as promptly as possible.

M. This permit may be transferred only according to the provisions of 31 TAC Section 341.235 (relating to Transfer of Permits) and 31 TAC Section 341.270 (relating to Action on Application for Transfers).

N. All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 31 TAC Section 341.317 relating to Signatories to Reports.

O. This permit may be amended, suspended and reissued, or revoked for cause. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

P. This permit does not convey any property rights of any sort, or any exclusive privilege.

Q. Monitoring results shall be provided at the intervals specified elsewhere in this permit.

R. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Austin Office of the Department no later than 14 days following each schedule date.

S. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

T. The permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency order issued by the Commission.

U. For a new facility, the permittee shall not commence storage, processing or disposal of solid waste; and for a facility being modified, the permittee shall not process, store or dispose of solid waste in the modified portion of the facility, until:

1. The permittee has notified the local TDWR District Office and submitted to the Executive Director by certified mail or hand delivery a certification prepared and sealed by a professional engineer with current registration pursuant to the Texas Engineering Practice Act, and signed by the permittee. Required certification shall be in the following form:

This is to certify that construction of the following facility components authorized or required by TDWR Permit No. 50043 has been completed, and that construction of said facilities has been performed in accordance with and in compliance with the design and construction specifications of permit No. 50043:

(Description of facility components with reference to applicable permit provisions), and

2. The Executive Director has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or within 15 days of submission of the letter required by Provision V.U.1., the permittee has not received notice from the Executive Director of an intent to inspect, prior inspection is waived and the permittee may commence processing, storage or disposal of solid waste.

V. The following shall be included as information which must be reported orally within 24 hours pursuant to Provision V.I.:

1. Information concerning release of any solid waste that may cause an endangerment to public drinking water supplies.

2. Any information of a release or discharge of solid waste, or of a fire or explosion from a facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

a. name, address, and telephone number of the owner or operator;

b. name, address, and telephone number of the facility;

c. date, time and type of incident;

d. name and quantity of material(s) involved;

e. the extent of injuries, if any;

f. an assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

g. estimated quantity and disposition of recovered material that resulted from the incident.

W. The Executive Director may waive the five-day written notice requirement as specified in Provision V.I. in favor of a written report submitted to the Department within 15 days of the time the permittee becomes aware of the noncompliance or condition.

X. The permittee shall prepare an annual report required under 31 TAC 335.71. This annual report shall be submitted to the Department on or before January 21 of each calendar year following the effective date of this permit.

Y. Emissions from this facility must not cause or contribute to a condition of "air polution" as defined in Section 1.03 of the Texas Clean Air Act or violate Section 4.01 of the Texas Clean Air Act, Article 4477-5, V.A.T.S. If the Executive Director of the Texas Air Control Board determines that such a condition or violation occurs, the permittee shall implement additional abatement measures as necessary to control or prevent the condition or violation.

VI. Incorporated Requirements

A. The following Texas Department of Water Resources regulations are hereby made provisions and conditions of this permit:

1. 31 Texas Administrative Code (TAC) Section 335.453;

2. 31 TAC Section 335.454; and

3. 31 TAC Section 335.455.

B. To the extent applicable to the activities authorized by this permit, the following provisions of 40 CFR Part 264, adopted by reference at 31 TAC Section 335.452, are hereby made provisions and conditions of this permit, except as otherwise provided in 31 TAC Sections 335.12, 335.15, and 335.453-335.455, and to the extent consistent with the Solid Waste Disposal Act, Article 4477-7, Revised Civil Statutes, and the Rules of the Texas Water Development Board:

1. Subpart B - General Facility Standards;

2. Subpart C - Preparedness and Prevention;

3. Subpart D - Contingency Plan and Emergency Procedures;

4. Subpart E - Manifest System, Recordkeeping, and Reporting;

5. Subpart G - Closure and Post-closure;

6. Subpart H - Financial Requirements;

7. Subpart I - Use and Management of Containers;

8. Subpart J - Tanks; and

9. Subpart O - Incinerators

NAME: Texas Eastman Company

C. 1. Waste analysis plan in accordance with 40 CFR Section 264.13(b) as submitted in the application.

2. General inspection schedule in accordance with 40 CFR Sections 264.15(b), 264.174 and 264.175, as submitted in the application and as may be amended by the terms of this permit.

3. Contingency plan in accordance with 40 CFR Part 264, Subpart D, as submitted in the application.

Attachment A

MONITORING SYSTEMS

Parameter	Monitoring Method	Location of Monitoring Device
Waste Feed Composition	GC/MS	Sample ports for pumpable wastes. Drums can be sampled individually.
Waste Feed Rate		
Liquids	Orifice Plate	Prior to nozzle
Easy-to-pump sludge	Magnetic Flowmeters or Mass Flowmeters	Prior to nozzle
Hard-to-pump sludge	Magnetic Flowmeters or Mass Flowmeters	Line to feed nozzle
Slurry system	Magnetic Flowmeters or Mass Flowmeters	Line to feed nozzle
Auxiliary Fuel Feed Rate	Orifice Plate	Prior to nozzle
Secondary Combustion Chamber Temperature	Dual Mode Thermocouple	At point of lowest temperature in secondary combustion chamber, in fourth subchamber
Combustion Air Flow Rate	Annubar	Stack
%CO	Infrared Instrument	Between boiler and quench chamber

PERMIT NO. 00471
(Corresponds to
NPDES PERMIT NO. TX 0000949)

This permit is a renewal of Permit No. 00471, approved July 28, 1980.

TEXAS WATER COMMISSION
Stephen F. Austin State Office Building
Austin, Texas

PERMIT TO DISPOSE OF WASTES
under provisions of Chapter 26
of the Texas Water Code

Texas Eastman Company TXD007330202
X-Ref SA-Vol 1

SUPERFUND FILE

JUN 12 1992

REORGANIZED

whose mailing address is

P.O. Box 7444
Longview, Texas 75607

is authorized to dispose of wastes from a plant manufacturing organic chemicals and plastics (SIC 2869 and 2821)

located five miles southeast of the City of Longview, Harrison County, Texas

to Segment No. 0505 of the Sabine River in the Sabine River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein. This permit is granted subject to the rules of the Department, the laws of the State of Texas, and other orders of the Commission. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the herein described discharged route. This includes property belonging to but not limited to any individual, partnership, corporation or public entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the herein described discharge route.

This permit and the authorization contained herein shall expire at midnight, five years after the date of Commission approval.

APPROVED, ISSUED AND EFFECTIVE this 22nd day of August, 19 83.

ATTEST: Mary Ann Hefner

For the Commission

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date **and lasting through** expiration date, **the permittee is authorized to discharge from outfall(s) serial number(s)** 001, cooling water, storm water runoff, steam plant blowdown, HCl vent scrubber water and vacuum jet water.
Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day (lbs/day) Daily Avg	Daily Max	Other Units (Specify) Daily Avg	Daily Max	Monitoring Requirements Measurement Frequency	Sample Type
Flow—m³/Day (MGD)	N/A	N/A	Report	Report	6/day	Instantaneous
Total Organic Carbon	Report	Report	N/A	50 mg/l	1/day	Grab
Temperature, Degrees	N/A	N/A	N/A	41(105F)*	1/day	Grab
Biochemical Oxygen Demand (5-day)	Report	Report	N/A	10 mg/l	1/day	Grab
Chlorinated Hydrocarbons	N/A	N/A	N/A	0.2 mg/l**	1/month	Grab

* Instantaneous maximum.
** Refer to Part III, Item 11.

The pH shall not be less than 6.0 **standard units nor greater than** 9.0 **standard units and shall be monitored** 1/day by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 001, at the concrete spillway overflow from Ferguson Lake.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 002.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)						

None - See Outfall 102 and Outfall 202.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
At Outfall 002, on company property where Buckhorn Creek discharges to the Sabine River.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration date,
the permittee is authorized to discharge from outfall(s) serial number(s) 102, effluent from chromate settling basin.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	Report	Report	Continuous	Record
Total Chromium	N/A	N/A	0.4 mg/l	0.8 mg/l	1/day	24-hr. composite
Total Organic Carbon	318(700)	450(992)	N/A	N/A	1/day	24-hr. composite
Chlorinated Hydrocarbons	N/A	N/A	N/A	0.2 mg/l*	1/month	24-hr. composite

* Refer to Part III, Item 11.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
At Outfall 102, effluent from chromate settling basin prior to mixing with other plant effluent and before being discharged into Buckhorn Creek on Company property in Harrison County, Texas.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 202, effluent from Lagoon 8 and/or deionization system.
Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations kg/day (lbs/day)		Other Units (Specify)		Monitoring Requirements	
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	Report	Report	Continuous	Record
Biochemical Oxygen Demand (5-day)	142(313)	227(501)	N/A	N/A	1/day	24-hr. composite
Total Organic Carbon	426(939)	680(1500)	N/A	N/A	1/day	24-hr. composite
Total Suspended Solids	511(1126)	770(1700)	N/A	N/A	3/week	24-hr. composite
Chlorinated Hydrocarbons	N/A	N/A	N/A	0.2 mg/l*	2/month	24-hr. composite
Sulfates	Report	Report	N/A	N/A	2/week	24-hr. composite

* Refer to Part III, Item 11.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/day by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 202, just leaving Lagoon 8 and before entering Buckhorn Creek on Company property in Harrison County, Texas.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date **and lasting through** expiration date,
the permittee is authorized to discharge from outfall(s) serial number(s) 003, treated industrial wastewater

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	Report	Report	Continuous	Record
Biochemical Oxygen Demand (5-day)	615(1356)	986(2173)	N/A	N/A	1/day	24-hr. composite
Total Organic Carbon	4095(9027)	6123(13500)	N/A	N/A	1/day	24-hr. composite
Total Suspended Solids	3141(6925)	6092(13430)	N/A	N/A	3/week	24-hr. composite
Chlorinated Hydrocarbons	N/A	N/A	N/A	0.2 mg/l*	2/month	24-hr. composite
Phenols	N/A	N/A	0.1 mg/l**	0.2 mg/l**	3/week	Grab

* Refer to Part III, Item 11.
** Daily average and daily maximum limits beginning July 1, 1984. Measure and report only until July 1, 1984.

The pH shall not be less than 6.0 **standard units nor greater than** 9.0 **standard units and shall be monitored** 1/day by grab sample (See Part III, Item 5).

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
At Outfall 003, at the outlet from Talley No. 3 and just before entering the Sabine River.

PART III

OTHER REQUIREMENTS

1. The following additional limitations apply to Outfall 102:

Volume: Not to exceed an average of 1,400,000 gallons per day
Not to exceed a maximum of 2,000,000 gallons per day

Table 1

Pollutant	Grab Samples, mg/l Column 1	Column 2
Total Organic Carbon	75	105
Total Chromium	N/A	1.5
Chlorinated Hydrocarbons (See Part III, Item 11)	N/A	0.2

2. The following additional limitations apply to Outfall 202:

Volume: Not to exceed an average of 1,500,000 gallons per day
Not to exceed a maximum of 2,500,000 gallons per day

Table 2

Pollutant	Grab Samples, mg/l Column 1	Column 2
Biochemical Oxygen Demand (5-day)	40	50
Total Organic Carbon	100	160
Total Suspended Solids	110	170
Chlorinated Hydrocarbons (See Part III, Item 11)	N/A	0.2

3. The following additional limitations apply to Outfall 003:

Volume: Not to exceed an average of 7,000,000 gallons per day
Not to exceed a maximum of 12,000,000 gallons per day

Table 3

Pollutant	Grab Samples, mg/l Column 1	Column 2
Biochemical Oxygen Demand (5-day)	40	50
Total Organic Carbon	210	340
Total Suspended Solids	200	420
Chlorinated Hydrocarbons (See Part III, Item 11)	N/A	0.2
Phenols (effective July 1, 1984)	N/A	0.5

PART III

OTHER REQUIREMENTS

4. No discharge of any material from Talley 1 is permitted without prior written approval by the Executive Director.

5. The pH monitoring of Outfall 003 shall be required once a day with a grab sample taken between the hours of 5 a.m. and 9 a.m. Central Time.

6. The permittee shall conduct screening-type biota toxicity tests of Outfall 003 effluent on a frequency of once per quarter, using testing conditions and procedures acceptable to the Executive Director of the Texas Department of Water Resources*. The first test shall be started within 90 days after the effective date of this permit. If eighty (80) percent of the test organisms survive during a test period, the toxicity of the water will be considered negligible.

   a. If the results of the biota toxicity screening tests indicate negligible toxicity for a 12-month period, the frequency of the testing may be reduced or the testing requirement may be eliminated with prior approval of the Executive Director.

   b. If a test result indicates a positive toxicity (survival of less than 80 percent of the test organisms) the permittee shall within 24 hours of receiving the positive test results conduct a 48-hour median lethal concentration (LC50) test using test conditions and procedures acceptable to the Executive Director*. The permittee shall report the test results to the Austin and District 5 Offices of the Texas Department of Water Resources within five working days of receiving the test results. After reviewing the test results, the Executive Director or his designee (District 5 Supervisor) may request the permittee to submit within 90 days an explanation of the possible source or sources of the toxicity and a plan for toxicity reduction.

   * Refer to "Methods for Measuring the Acute Toxicity of Effluents to Aquatic Organisms," EPA-600/4-78-012 (Revised July, 1978). An equivalent method for determining toxicity of the effluent may be substituted with prior approval of the Executive Director. Organisms that can be acclimated to the pH of the effluent (such as fat head minnows, gambuzia, or bluegill fry) shall be used for the tests.

PART III

OTHER REQUIREMENTS

7. All organic process discharges (Outfalls 202 and 003) shall be discontinued when the river flow measured at Highway 149 minus the permittee's intake from the river is less than ten million gallons per day.

8. In normal operation, wastewater from the deionization unit (DI wastewater) is sent to Lagoon 8. In periods when Outfall 202 is not authorized, the applicant may neutralize DI wastewater to a pH between 6.0 and 9.0 and discharge it into Buckhorn Creek.

9. The permittee shall continue the groundwater monitoring program presented in the report Hydrogeologic Study - Phase II For Texas Eastman Company, submitted to the Texas Department of Water Resources, March 4, 1982. The sampling schedule shall be as follows:

Monitor Wells	Parameters and Sampling Frequency* (↖ see Part III)
MW-1	C 2/year
MW-4	C 2/year
MW-7	C 2/year
MW-10	C 2/year
TEX-3-S	A 1/year; B 2/year
TEX-5-S	A 1/year; B 2/year
TEX-9-S	A 1/year; B 2/year
TEX-14-S	A 1/year; B 2/year
TEX-17-S	C 2/year
TEX-18-S	A 1/year; B 2/year
TEX-19-S	A 1/year; B 2/year
TEX-20-S	A 1/year; B 2/year
TEX-24-S	A 1/year; B 2/year
TEX-25-S	A 1/year; B 2/year
TEX-2-D	C 1/year
TEX-3-D	C 1/year
TEX-4-D	C 1/year
TEX-6-D	C 1/year
TEX-7-D	C 1/year
TEX-8-D	C 1/year
TEX-10-D	C 1/year
TEX-11D	C 1/year

November 13, 1984

1984

Mr. Charles E. Nemir
Executive Director
Texas Department of Water Resources
P.O. Box 13087, Capitol Station
Austin, Texas 78711

Dear Mr. Nemir:

As required by Paragraph 6.b., Part III of Permit No. 00471, Texas Eastman Company is hereby providing notification that the biota toxicity screening test conducted on Outfall 003 resulted in a positive toxicity of 50 percent. These results were received on November 5, 1984.

On November 6, a test to determine the 48-hour LC_{50} was initiated. This test gave the following observations:

24% dilution	10% toxic
37% dilution	30% toxic
56% dilution	40% toxic
75% dilution	40% toxic
100% dilution	40% toxic

This data does not permit the calculation of an LC_{50} since there was insufficient toxicity.

The tests were conducted using Gambuzia as the test organism. This test was the fifth quarterly testing conducted under the provisions of the permit. All previous screening tests resulted in 100 percent survival of the test species.

If you have any questions, please contact Dr. Tom McAninch at (214) 236-5000, Extension 3116.

Very truly yours,

Dael Baughman, P.E.
Engineering Associate
Clean Environment Program

lbg

cc: Mr. Bill Boggs, Supervisor
Texas Department of Water Resources
District 5
2807 Highway 42 North
Kilgore, Texas 75662

State Permit No. WQ 0000471
NPDES Permit No. TX 0000949
INSPECTION DATE 9-4-84

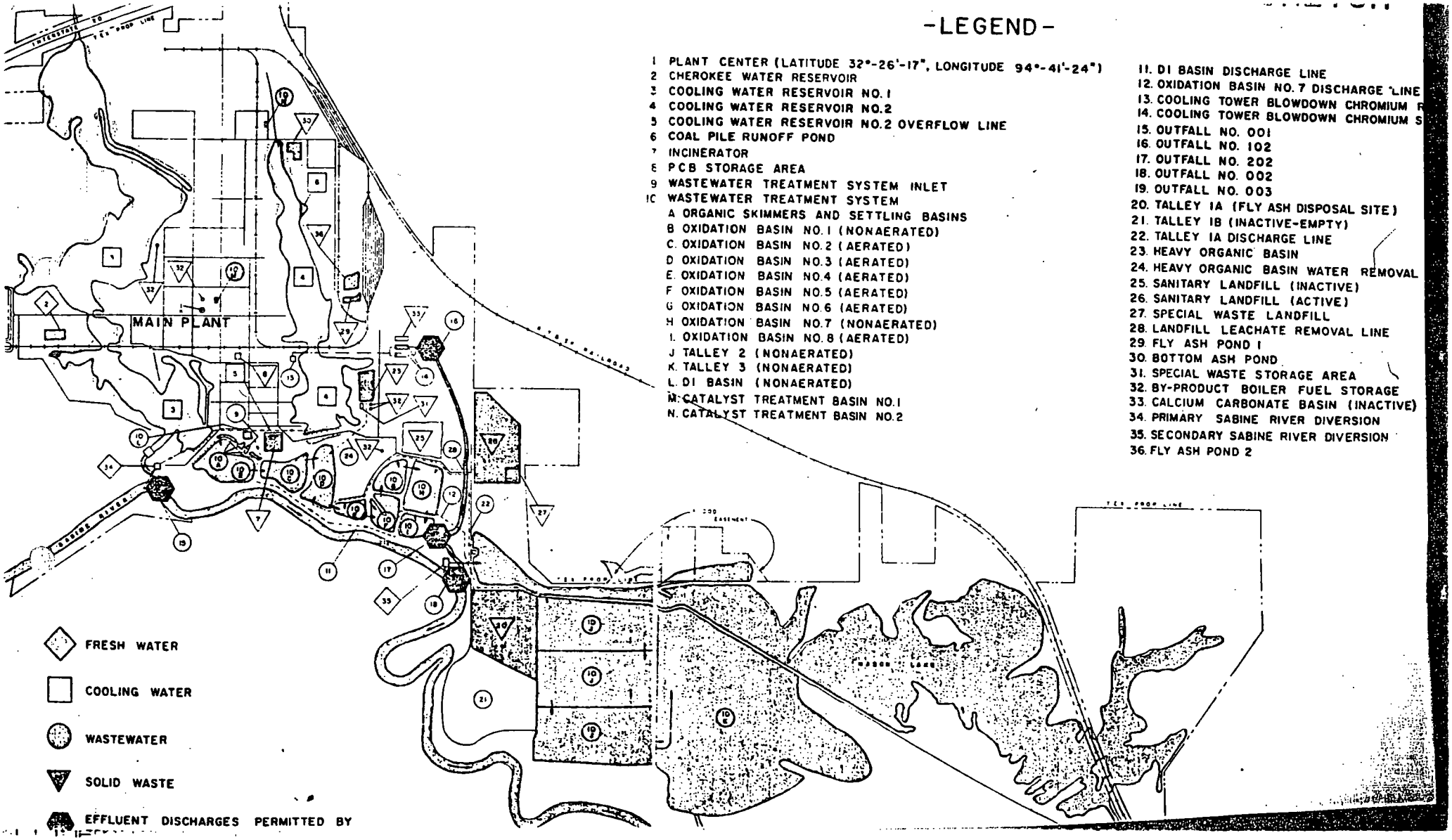
Texas Department of Water Resources
Domestic/Industrial Inspection Report

Permittee Name		( ) Domestic (X) Industry - Type Organic Chemicals Manuf.
TEXAS EASTMAN COMPANY		
Responsible Officials	**Title**	**Phone**
J. E. Dworsky	Operations Staff Manager	214/236-5000
H. Dael Baughman	Clean Environment Group Coordinator	"
Tom McAninch	Senior Chemist	"

A. TYPE TREATMENT PLANT. Describe in brief terms and attach schematic.
15 lagoons covering approx 540 surface acres. The functions of the various lagoons include skimming, settling, aeration, and facultative oxidation. See attached schematic for function & location

Has the treatment plant been modified in the last 12 months? ( ) Yes. (X) No. If yes, please explain changes made and identify date that facilities were placed in service.

Were new facilities constructed in accordance with approved plans and specifications? ( ) Yes. ( ) No. (X) N/A. If no, what action has been undertaken by the District office?



-LEGEND-

1 PLANT CENTER (LATITUDE 32°-26'-17", LONGITUDE 94°-41'-24")
2 CHEROKEE WATER RESERVOIR
3 COOLING WATER RESERVOIR NO. 1
4 COOLING WATER RESERVOIR NO.2
5 COOLING WATER RESERVOIR NO.2 OVERFLOW LINE
6 COAL PILE RUNOFF POND
7 INCINERATOR
8 PCB STORAGE AREA
9 WASTEWATER TREATMENT SYSTEM INLET
10 WASTEWATER TREATMENT SYSTEM
A ORGANIC SKIMMERS AND SETTLING BASINS
B OXIDATION BASIN NO. 1 (NONAERATED)
C. OXIDATION BASIN NO.2 (AERATED)
D OXIDATION BASIN NO.3 (AERATED)
E. OXIDATION BASIN NO.4 (AERATED)
F OXIDATION BASIN NO.5 (AERATED)
G OXIDATION BASIN NO.6 (AERATED)
H OXIDATION BASIN NO.7 (NONAERATED)
I. OXIDATION BASIN NO. 8 (AERATED)
J TALLEY 2 (NONAERATED)
K. TALLEY 3 (NONAERATED)
L. DI BASIN (NONAERATED)
M. CATALYST TREATMENT BASIN NO.1
N. CATALYST TREATMENT BASIN NO.2

11. DI BASIN DISCHARGE LINE
12. OXIDATION BASIN NO. 7 DISCHARGE LINE
13. COOLING TOWER BLOWDOWN CHROMIUM R
14. COOLING TOWER BLOWDOWN CHROMIUM S
15. OUTFALL NO. 001
16. OUTFALL NO. 102
17. OUTFALL NO. 202
18. OUTFALL NO. 002
19. OUTFALL NO. 003
20. TALLEY IA (FLY ASH DISPOSAL SITE)
21. TALLEY IB (INACTIVE-EMPTY)
22. TALLEY IA DISCHARGE LINE
23. HEAVY ORGANIC BASIN
24. HEAVY ORGANIC BASIN WATER REMOVAL
25. SANITARY LANDFILL (INACTIVE)
26. SANITARY LANDFILL (ACTIVE)
27. SPECIAL WASTE LANDFILL
28. LANDFILL LEACHATE REMOVAL LINE
29. FLY ASH POND 1
30. BOTTOM ASH POND
31. SPECIAL WASTE STORAGE AREA
32. BY-PRODUCT BOILER FUEL STORAGE
33. CALCIUM CARBONATE BASIN (INACTIVE)
34. PRIMARY SABINE RIVER DIVERSION
35. SECONDARY SABINE RIVER DIVERSION
36. FLY ASH POND 2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL RESEARCH LABORATORY – DULUTH
6201 CONGDON BOULEVARD
DULUTH, MINNESOTA 55804

20 April 1984

Mr. David Quisenberry
Clean Environment Program
Eastman Chemicals Division
Kingsport TN 37662

Dear Mr. Quisenberry:

Attached is a copy of my report from our reconnaissance of the Sabine River.

Sincerely,

Nelson A. Thomas
Chief, Water Quality Research Branch

cc: James M. Lazorchak

PLACE: Sabine River, Texas

DATE: September 22 - 23, 1982

PURPOSE: Conduct Site Evaluation for Complex Effluent Testing Program

The Sabine River was evaluated for biological impact at:

1. Upstream from Longview, Texas, U.S. 259.
2. Downstream from Longview, Texas, S.H. 149.
3. Upstream from discharge pipe number 002 (100 yards).
4. Downstream from discharge pipe number 002 (50 yards).
5. Upstream discharge pipe number 003 (5 yards).
6. 100 - 200 feet downstream from discharge pipe number 003. Same side of river.
7. Both sides of river, 200 yards downstream from discharge pipe number 003.
8. Downstream from Texas Eastman (≈ 6 miles) - R.R. Bridge.

Qualitative sampling was conducted for benthos and fish. The general appearance of attached algae and habitat was also noted. The Sabine River was at low flow (28 cfs). The benthos habitat is a few rocks and branches along the river banks. The river contains only a few riffles; therefore, to maintain consistent habitat type, habitat along the edge of the pools was sampled.

Upstream from Longview, Texas, the benthos consisted of mayflies (2 to 3 types) hellgrammites, caddisflies, clams. The fish community contained spottail shiners, bluegills, redfin shiners and darters. The shiners were present in large numbers. Downstream from Longview, Texas, the number of species of fish and invertebrates was similar; however, the number of individuals increased responding to the increased productivity. The attached algae was more abundant at this station.

Immediately upstream for 002, the same population was observed as was at the previous station. Shiners were observed swimming in the ditch carrying the effluent from 002 to the river. Immediately downstream, mayflies, hellgrammites and clams were observed. The fish population was the same as was observed upstream. Between 002 and 003, approximately two miles, seepage entered the river from the Texas Eastman side. The seepage depressed the number of individuals, but not the number of species of benthos. The fish population was comprised of the same species. The amount of attached algae decreased to a level observed upstream of Longview, Texas.

Immediately downstream from 003, no adverse impact from the water in 003 was observed on either the benthos or fish communities. The benthos community consisted of mayflies (two types), hellgrammites, limpeds, clams and amipods. The fish community consisted of redfin, spottail and silver shiners.

Approximately six miles downstream, the biota was the same except a young channel catfish was captured.

In conclusion, from the benthos and fish sampling conducted on the Sabine River, the discharge from 002 and 003 did not have an impact of the Sabine River biota. Seepage entering between 002 and 003 depressed the number of individuals present, but not the number of species.

The toxicity tests are discussed in the attachment with the conclusion that 002 was not toxic and 003 was toxic at 50 and 100 percent concentration. The reason that there was not an observed impact of 003 is that its discharge rate was reportedly 1 mgd or 1.5 cfs and was diluted by the 28 cfs of the Sabine River and this gave about 18 fold dilution. To have an impact, the effluent would have been toxic at the 5 percent level.

In summary, at the dilution that occurred during the low flow stage of the Sabine River impact from 002 and 003 would not have been predicted to occur and none was observed during the field sampling.

Attachment

Subject: Ceriodaphnia Exposure to Stream Water Samples

Ceriodaphnia vs. Stream Water (obtained 9/27/82, stored at 15°C).

Stream water was sampled and labelled as follows:

Upstream Control, Station 2

Site 002

Site 003

Downstream, Station 8

To conduct bioassays with Ceriodaphnia the following was done.

Placed 25 - 30 adult daphnids in control upstream water (25°C ± 2°) for two days and obtained < 24L old young for test the second day. Transferred daphnids to nalgene beakers containing 15 mls of each water with the following replications:

Upstream (100% control) 10 beakers with one animal in each.

Site 002 (25% stream, 75% control) 10 beakers with one animal in each.

Site 002 (50% stream, 50% control) 10 beakers with one animal in each.

Site 002 (100%) 10 beakers with one animal in each.

Site 003 (25% stream, 75% control) 10 beakers with one animal in each.

Site 003 (50% stream, 50% control) 10 beakers with one animal in each.

Site 003 (100%) 10 beakers with one animal in each.

Downstream (100%) 10 beakers with one animal in each.

Solutions were renewed and animals were transferred every two days (Wednesday start, Friday, mm and Wednesday, end of test). Test lasted seven days total. Animals were fed one drop yeast mixture (Mount) each day. The results are as follows:

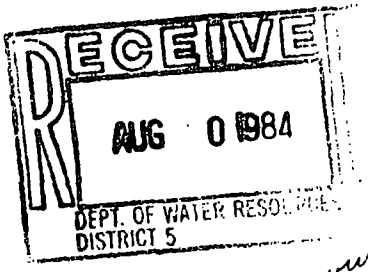
	Upstream Control	002 (25%)	002 (50%)	002 (100%)	003 (25%)	003 (50%)	003 (100%)	Downstream
Survival (7 days)	70%	90%	**88%	80%	60%	0%	0%	100%
Total Young Production (7 days)	77	77	78	76	52	0	0	121
♀	11	8.6	8.7	9.5	8.7			12.1

* 10 replications per treatment were used; each containing 1 daphnid

** 9 replications were used (spilled one).

SUMMARY

Water samples from 003 were toxic. Fifty and one hundred percent solutions killed all Ceriodaphnia within 48-h. It appears that a 25% solution of 003 was not toxic. Twenty-five, fifty and one hundred percent solutions of 002 water appeared to have no adverse effect on survival or reproduction where compared to the upstream control. Daphnids did the best in the downstream water.



August 8, 1984

Mr. Terry Davis
Texas Department of Water Resources
2807 Highway 42 North
Kilgore, Texas 75662

Dear Mr. Davis:

Attached is the data requested in your phone conversation with Dr. Tom McAninch on August 8, 1984. The data requested is the latest results of the groundwater well analysis as required under TDWR Wastewater Permit No. 00471.

If you have any questions, please contact Dr. McAninch at (214) 236-5000, Extension 3116.

Very truly yours,

Dael Baughman, P.E.
Engineering Associate
Clean Environment Program

lbg

Attachment

Groundwater Data

Texas Eastman Company

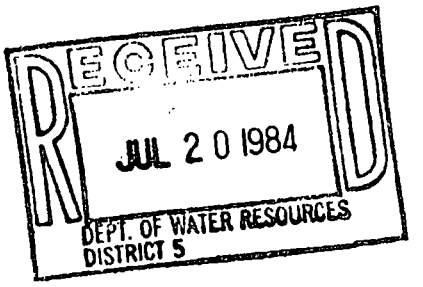
1st Quarter, 1984

WELL NUM	AQUIFER	REG STAT	FACILITY	DATE	WTR LEVEL	PH	TOC	TOH	SP COND	CHLORIDE	IRON	MANGANESE	SULFATE	SODIUM	PHENOLS	CALCIUM	MAGNESIUM	POTASSIUM	BICARB ALK	NITRATE
3-S	SHAL	RCRA	LAGOON	840411	229.35	3.5	6	2.32	1500	520	3	1.2	165	180	0.022	64	50	10	200	<3.0
5-S	SHAL	RCRA	LAGOON	840411	232.92	6.4	19	0.52	4500	1440	20	4.5	2150	800	0.020	160	85	19	60	<3.0
9-S	SHAL	RCRA	LAGOON	840411	243.00	7.4	115	1.05	4000	528	5.8	4.9	11	980	0.050	55	15	15	140	<3.0
14-S	SHAL	RCRA	BACKGROUND	840411	272.19	7.4	5	0.32	300	16	0.2	0.7	127	39	0.744	110	21	4.2	300	<0.3
18-S	SHAL	RCRA	HOB	840411	270.47	7.7	7	1.42	550	30	2.5	1.7	101	65	0.270	90	28	18	300	<3.0
19-S	SHAL	RCRA	HOB	840411	273.97	10.7	110	0.005	600	25	1	>0.1	53	30	<0.004	41	1.7	30	60	<3.0
20-S	SHAL	RCRA	HOB	840411	269.19	5.4	4000	0.25	3800	177	680	0.6	54	250	0.920	470	34	20	200	<3.0
24-S[1]	shal	rcra	landfill	840411	250.82	7.8	250	0.92	2400	366	9.7	0.3	3	595	<0.004	30	39	-	840	<3.0
25-S	SHAL	RCRA	LANDFILL	840411	250.70	7.4	37/37	1.44	750	33	4.2	2.5	12	14	<0.004	80	16	2.7	300	<3.0
26-S	SHAL	RCRA	LANDFILL	840411	271.9	6.0	175	1.89	460	34	50	0.5	33	23	<0.004	14	15	2.1	100	<3.0
27-S	SHAL	RCRA	LANDFILL	840411	260.4	7.5	19	2.79	800	68	4.9	1	112	110	<0.004	25	20	3.5	120	<3.0
28-S	SHAL	RCRA	LANDFILL	840411	252.03	6.8	8	0.06	300	13	10	<.3	42	20	<0.004	10	11	3.3	40	<3.0
29-S	SHAL	RCRA	LANDFILL	840411	251.9	6.7	13	2.68	320	25	15	0.3	37	11	0.004	15	9	2.1	40	<3.0
MW-2	SHAL	TDWR	FA#1	840411	280.68	6.8	19		360											
MW-4	SHAL	TDWR	FA#2	840411	275.94	7.0	7		600											
W-4	SHAL	TDWR	TALLEY 1	840411	225.0	4.8	4150		9500											
W-7	SHAL	TDWR	TALLEY 1	840411	243.0	5.3	250		4350											
W-10	SHAL	TDWR	TALLEY 1	840411	243.58	5.5	435		3900											
17-S	SHAL	TDWR	CRO4 BASIN	840411	280.83	4.8	21		2350											

All parameters expressed as ppm except pH and specific conductivity

[1]Groundwater Quality Assessment Plan indicates 24-S monitors nonhazardous landfill

#00471



April 12, 1984

Texas Department of Water Resources
Shipping Control and Effluent Reports Unit
Enforcement and Field Operations
P.O. Box 13087, Capitol Station
Austin, Texas 78711

Gentlemen:

Re: Annual Waste Summary
TDWR Wastewater Permit 00471

Attached is the groundwater data required by the above permit on the shallow monitoring wells around our nonhazardous facilities and the deep wells at the plant. The wells were sampled and analyzed in accordance with the schedule established in the permit. However, the results were inadvertently omitted from the Annual Waste Summary submitted on January 20, 1984.

If you have any questions, please contact Dr. Tom McAninch at (214) 236-5000, Extension 3116.

Very truly yours,

Dael Baughman, P.E.
Engineering Associate
Clean Environment Program

lbg

Attachment

7/16/84 -BV

Groundwater Data

Non-RCRA Wells

Well #	TOC, ppm	Conductance, μmho	pH	Water Level
MW-1	8	380	7.2	274.68
MW-4	8	330	7.2	285.36
W-4	2825	6900	5.5	242.27
W-7	853	5000	5.6	240.70
W-10	704	3575	5.9	243.09
17-S	18	2300	6.6	280.83
2-D	6	1250	8.4	246.01
3-D	24	1300	8.4	228.55
4-D	6	900	8.3	203.26
6-D	6	1600	8.3	221.91
7-D	7	600	9.0	259.92
8-D	7	1000	8.8	265.61
10-D	7	800	9.7	228.01
11-D	7	1000	8.4	209.06

February 21, 1984

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Charles Nemir, Executive Director
Texas Department of Water Resources
P.O. Box 13087, Capitol Station
Austin, Texas 78711

Dear Mr. Nemir:

Re: TDWR Permit No. 00471

Please be advised that the BOD_5 values for Outfall 001 exceeded permit limits of 10 for the dates shown. We first became aware of this when we obtained the February 12 value on February 17. The measured BOD values were as follows:

February 12 - 18 mg/l
February 15 - 15 mg/l
February 16 - 14 mg/l

As reported verbally to Mr. Bill Boggs, Supervisor of the Kilgore office, the primary cause of this exceedance was a freeze damaged check valve and relief valve which occurred during the severe cold weather of late December and several other lesser weather related problems. The damaged valves allowed certain chemicals, primarily alcohols, ethyl acetate and aldehydes to flow into Cooling Water Reservoir No. 2. There were no chlorinated hydrocarbons involved. The problem was discovered and repaired on January 13, 1984. The repair was made in such a manner that in the event of a future failure such material will be returned to a tank. In addition, we have provided more freeze protection in vulnerable areas which should serve to reduce the chances of a similar problem occurring.

Immediately upon our becoming aware of this occurrence, we took steps to prevent the material from reaching the Sabine River. Since we were in a period of dry weather, it appeared for sometime that these steps were going to be successful. However, the February 11 rain of 4.25 inches in a few hours and heavy run-off that followed caused flow to begin at the Outfall 001 spillway.

As of February 20, we are no longer overflowing the spillway. Our data indicates that the BOD is dropping although, due to the cold water temperature, not as fast as would be normally expected. We anticipate that a steady decline in BOD values will occur.

Texas Eastman Company has a continuous program to keep unintentional discharges to the cooling reservoirs from occurring. The program will be continued with increased emphasis to minimize recurrences of this type.

If you have any questions, please contact Dr. Tom McAninch at (214) 236-5000, Extension 3116.

Very truly yours,

Dael Baughman

Dael Baughman, P.E.
Engineering Associate
Clean Environment Program

lbg

cc: Mr. Bill Boggs
Texas Department of Water Resources
Rt. 1, Box 323
Kilgore, Texas 75662

Texas Department of Water Resources

INTEROFFICE MEMORANDUM

TO : Susan White, Wastewater Compliance Unit, Wastewater & Water Use, Enforcement & Field Operations
DATE: October 18, 1983

THRU : George Green, Wastewater & Water Use, Enforcement & Field Operations

FROM : Terrence M. Davis, Engineering Technician, District 5

SUBJECT: Sample Results Addendum to Texas Eastman Company, Major Wastewater Inspection Report, 6-20-83, Permit No. 00471.

The attached Chain of Custody Tags, Nos. IN13287 - IN13289, requested analysis of chlorinated hydrocarbons, a permit parameter required for Texas Eastman outfalls 003, 202, and 001.

Analysis could not detect the presence of either volatile or extractible chlorinated hydrocarbons (detection limits, <5 ug/L). These results were pending at the time the inspection report was submitted.

Please attach this addendum to the 6-20-83 report.

Terrence M. Davis

Terrence M. Davis

Billy H. Boggs

Billy H. Boggs, Supervisor

Attachment

TEXAS WATER QUALITY BOARD

No. IN 13287 District 5 County HARRISON Basin SABINE 0505

Discharger Name TEXAS EASTMAN Time Collected 1100 hrs

Plant Name _____ Point of Collection Outfall 003

Method of Flow Measurement 6' RECT. WEIR _____

PERMIT NUMBER	PAGE NO.	CARD TYPE	DATE Mo.	DATE Day	DATE Yr.	MAT. SAMP.
1 — 9	10 — 12	13	14 15	16 17	18 19	20
0 0 4 7 4	0 0 3		0 5	1 1	8 3	F

Chlorine Contact Time _____

Date Shipped 5-11-83

Collector's Signature _____

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE 62
Flow (~~GPD~~) MGD		Water Temperature (°F)		pH (EPA)	
0 0 0 5 6	8.3	0 0 0 1 1		0 0 4 0 0	9.0
D.O. (mg/l)		Turbidity (JTU)			
0 0 3 0 0		0 0 0 7 0			

TEXAS WATER QUALITY BOARD

No. IN 13287 District 5

Type Sample: Industrial

Grab ✓ Composite _____ Hr.

Observations _____

MAY 12 1983

Lab. Used TDH Lab. No. EW3 1871

Material Sampled: Raw, Partially Treated, Final, Stream

Method of Preservation ICE

Type Facility ORG. CHEM. MANUF.

Auxiliary Tags 12+11257

Date Completed 05 06 83

Analyst's Signature _____

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE 62
[redacted]		[redacted]		[redacted]	
0 [redacted] 3		0 0 0 9 5		[redacted]	
V [redacted]		[redacted] 5 day		[redacted]	
0 [redacted]		0 0 3 1 0		[redacted]	
P [redacted] (mg/l)		[redacted] Alkalinity (mg/l)		Hardness (mg/l)	
0 0 4 1 5		0 [redacted]		0 0 [redacted] 0	

chlorinated hydrocarbons as meth Cl2 (volatiles ug/l) VOA - SEE ATTACHED SHEET

chlorinated hydrocarbons as meth Cl2 (extractibles ug/l) ~~GC/MS~~ PEST. PCB

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: Laboratory No.: EW3 1871 Sample No.: IN 13287

Date Received: 12 MAY 83 Delivered By: TDWR Condition of Seals: INTACT

Description of Sample: WATER

From: GC/MS Analysis

LABORATORY FINDINGS

I. Analysis by GC/MS for chlorinated volatiles.
No EPA volatile organics detected < 5 ug/liter
No other volatiles detected < 5 ug/liter

II. Pesticide analysis (GC)

No Pesticides or PCBs detected

JUL 06 1983
Date Reported

FORM NO. G-59

535 - 7054

No. IN 13288 District 5 County HARRISON Basin SABINE

Discharger Name TEXAS EASTMAN Time Collected 1020 HRS

Plant Name _____ Point of Collection OUTFALL 202

Method of Flow Measurement 90° V-NOTCH

Chlorine Contact Time _____

Date Shipped 5-11-83

Collector's Signature Lorena M. Davis

PERMIT NUMBER (1–9)	PAGE NO. (10–12)	CARD TYPE (13)	DATE Mo. (14 15)	Day (16 17)	Yr. (18 19)	MAT. SAMP. (20)
0 0 4 7 1 0 0 3			0 5	1 1	8 3	P

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE 62
Flow ~~(cfd)~~ MGD		Water Temperature (°F)		pH	(s.u.)
0 0 0 5 6	.316	0 0 0 1 1		0 0 4 0 0	7.2
D.O. (mg/l)		Turbidity (JTU)			
0 0 3 0 0		0 0 0 7 0			

TEXAS WATER QUALITY BOARD

~~NO. IN~~ 13288 District 5

Type Sample: Industrial

Grab ✓ Composite _____ Hr.

Observations _____

Lab. Used TDH Lab. No. EW3 1872

Material Sampled: Raw, Partially Treated, Final, Stream

Method of Preservation ICE

Type Facility ORGANIC CHEM. MANUF.

Auxiliary Tags AT 11254

Date Completed JUL 05 1983

Analyst's Signature _____

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE 62
pH		Conductivity		TSS (mg/l)	
0 0 4 0 3		0 0 0 9 5		0 0 5 3 0	
VSS (mg/l)		BOD (mg/l) 5 day		COD (mg/l)	
0 0 5 3 5		0 0 3 1 0		0 0 3 3 5	
P. Alkalinity (mg/l)		T. Alkalinity (mg/l)		Hardness (mg/l)	
0 0 4 1 5		0 0 4 1 0		0 0 9 0 0	
Chlorinated hydrocarbons		as Meth CH_2Cl_2 (volatiles ug/l)		VOA - SEE ATTACHED SHEET	
Chlorinated hydrocarbons		as Meth CH_2Cl_2 (extractibles ug/l)		PEST + PCB	

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: Laboratory No.: EW3 1872 Sample No.: IN 13288

Date Received: 12MAY83 Delivered By: TDWR Condition of Seals: INTACT

Description of Sample: WATER

From: GC/MS ANALYSIS

LABORATORY FINDINGS

I. ANALYSIS BY GC/MS FOR VOLATILES.

NO EPA VOLATILES DETECTED < 5 ug/liter

NO OTHER VOLATILES DETECTED < 5 ug/liter

II. PESTICIDE AND PCB ANALYSIS (GC)

No Pesticides or PCBs detected

JUL 06 1983

Date Reported

FORM NO. G-59

TEXAS WATER QUALITY BOARD

5 55-4059

No. IN 13289 District 5 County HARRISON Basin SABINE 0505

Discharger Name TEXAS EASTMAN Time Collected 0945 HRS

Plant Name ______ Point of Collection Outfall 001

Method of Flow Measurement NOT DETERMINABLE

Chlorine Contact Time ______

Date Shipped 5-11-83

Collector's Signature [signature]

PERMIT NUMBER	PAGE NO.	CARD TYPE	DATE Mo.	Day	Yr.	MAT. SAMP.
1 – 9	10 – 12	13	14 15	16 17	18 19	20
00471	001		05	11	83	F

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE 62
Flow (gpd)		Water Temperature (°F)		pH	(EPA)
00056		00011		00400	7.0
D.O. (mg/l)	–	Turbidity (JTU)			
00300		00070			

EW3 1873

TEXAS WATER QUALITY BOARD

No. IN 13289 District 5

Lab. Used TDH Lab. No. EW3 1873

Material Sampled: Raw, Partially Treated, (Final), Stream

Type Sample: Industrial

Method of Preservation ICE

Grab ✓ Composite ______ Hr.

Type Facility ORGANIC CHEMICAL MANUF.

Auxiliary Tags AT 11259

Observations ______

Date Completed JUL 06 1983

Analyst's Signature ______

14+202 MAY 12 1983

21 CODE	26 PARAMETER VALUE	35 CODE	40 PARAMETER VALUE	49 CODE	54 PARAMETER VALUE 62
[redacted]		[redacted]		[redacted]	
0[redacted]		0[redacted]		[redacted]	
[redacted])		B[redacted] day		[redacted]	
0[redacted]		[redacted]		0[redacted]	
P[redacted] (mg/l)		[redacted] (mg/l)		[redacted])	
0[redacted]		0[redacted]		0[redacted]	
chlorinated hydrocarbons as MethCl₂		(volatile ug/L)	VCH - SEE ATTACHED SHEET		
chlorinated hydrocarbons as Meth Cl₂		(extractibles ug/L)	PEST + PCB		

Texas Department of Health

Bureau of Laboratories
Austin, Texas

Product: Laboratory No.: EW31873 Sample No.: IN 13289

Date Received: 12 MAY 83 Delivered By: TDWR Condition of Seals: INTACT

Description of Sample: WATER

From: GC/MS Analysis

LABORATORY FINDINGS

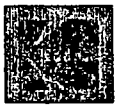
I. Analysis by GC/MS for volatile chlorinated organics
No EPA volatile organics detected < 5ug/liter
No other volatile organics detected < 5ug/liter

II. Pesticide and PCB analysis (GC method)

No Pesticides or PCBs detected

JUL 06 1983
Date Reported

FORM NO. G-59



June 3, 1983

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Charles E. Nemir
Executive Director
Texas Department of Water Resources
P.O. Box 13087, Capitol Station
Austin, Texas 78711

Dear Mr. Nemir:

In accordance with paragraph 335.194(d)(1) of the Texas Administrative Code, Texas Eastman Company is providing notification that the sampling and analysis of the required groundwater wells has indicated that groundwater quality may be affected when considering one or more of the indicator parameters.

We are in the process of working with Underground Resource Management to prepare a specific plan for a Groundwater Quality Assessment Program utilizing the results of the semi-annual monitoring. We plan on submitting our plan by June 17, 1983, along with the semi-annual data. Based on preliminary analysis of the data and our earlier Phase I and II reports, we continue to believe that the environment is not being significantly affected by our operations.

If you have any questions, please contact Dr. Tom McAninch at (214) 236-5000, Extension 3116.

Very truly yours,

Dael Baughman, P.E.
Engineering Associate
Clean Environment Program

lc

cc: Mr. Bill Boggs, Supervisor
Texas Department of Water Resources
District 5
Route 1, Box 323
2807 Hwy 42 North
Kilgore, Texas 75662

Compliance Summary
Texas Eastman Company
Permit No. 00471
May 17, 1983

1. Self-Reporting (February 1982 through January 1983)

Outfall 001 - No excursions reported.
Outfall 003 - No excursions reported.
Outfall 201 - No excursions reported.
Outfall 202 - One pH excursion reported.
Sum of Outfall 201, 202, and 003 - No excursions reported.

2. District Inspections:

May 10-11, 1983 - Results pending.

May 18, 1981 -

Outfall and Parameter	Measured Value	Permitted Value*	Primary Source of Wastewater
Outfall 001	No Discharge		Noncontact cooling creek (downstream)
Outfall 002			
pH	6.9	6-9	
Outfall 201			Cooling towers
Flow (MGD)		N/A	
Chromium (mg/l)	0.047	1.0	
pH	8.1	6-9	
Outfall 202	No Discharge		Process - Lagoon 8
Outfall 003			Process - Talley 3
Flow (MGD)	2.16	N/A	
BOD (mg/l)	23	N/A	
TSS (mg/l)	54	280	
TOC (mg/l)	Not analyzed	N/A	
Cl-Hydrocarbons	Non detected	N/A	
COD	480	N/A	
pH	8.8	6-9	
Sum of Outfalls 201, 202, 003			
Flow (MGD)	2.16	N/A	
BOD (lbs/day)	414	17,500	
TSS (lbs/day)	973	84,700	
TOC (lbs/day)	Not analyzed	Report	
COD (lbs/day)	8,647	178,500	
BOD	0.107	5	

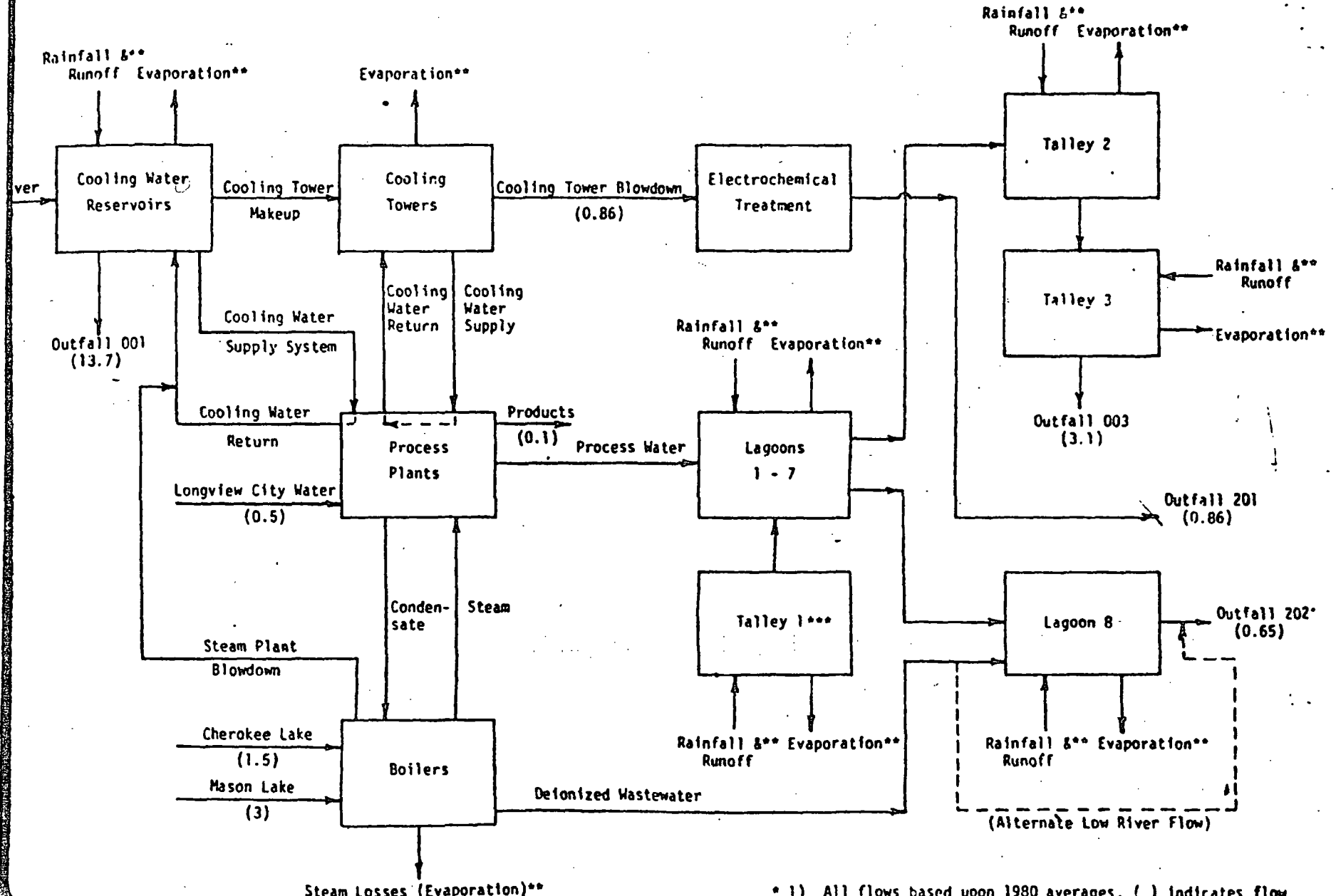
3. Assessment of Compliance

Self-reporting data and field inspection reports indicate that Texas Eastman is generally compliant with effluent limits. In 1981 and 1982, the Company submitted a 2-part report on ground water monitoring as required in the existing permit. The report suggests that the shallow aquifer under the plant has

been impacted by Texas Eastman waste facilities and that there is some seepage along the plant lagoon system to the Sabine River. The Company has contracted with the Academy of Natural Sciences to determine contamination plume effect on aquatic life in the Sabine River. The proposed permit provides for a ground water monitoring program and for biomonitoring toxicity tests to be conducted quarterly. The Department will continue to monitor developments closely.

SJW:jr

SCHEMATIC OF TEXAS EASTMAN WATER FLOW*



* 1) All flows based upon 1980 averages, ( ) indicates flow
2) All flows shown in millions of gallons per day

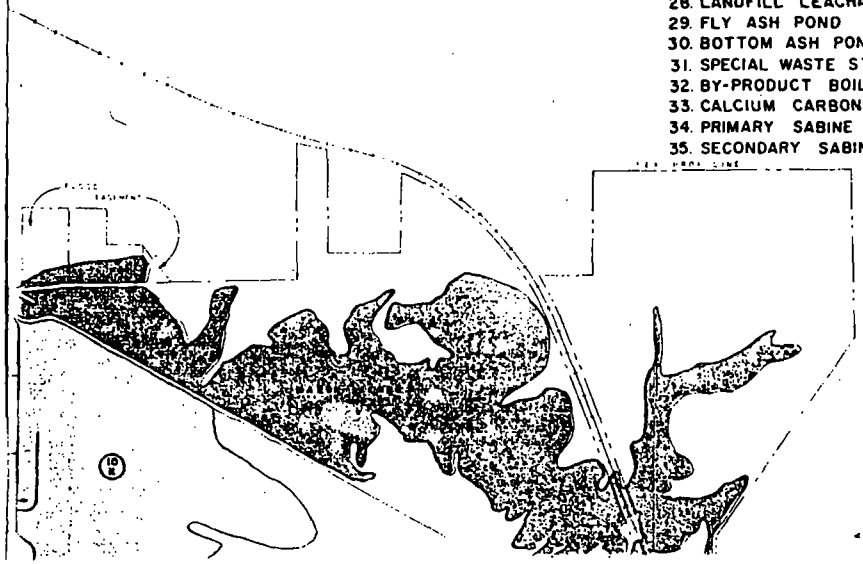
** 1) Total rainfall and runoff = 24.5 million gallons/day
2) Total evaporation = 15.545 million gallons/day

TEX

WASTE TREATMENT FACILITIES SK

-LEGEND-

0. PLANT CENTER (LATITUDE 32°-26'-17", LONGITUDE 94°-41'-24")
1. CHEROKEE WATER RESERVOIR
2. COOLING WATER RESERVOIR NO. 1
4. COOLING WATER RESERVOIR NO. 2
5. COOLING WATER RESERVOIR NO. 2 OVERFLOW LINE
6. COAL PILE RUNOFF POND
7. CATALYST TREATMENT BASIN NO. 1
8. CATALYST TREATMENT BASIN NO. 2
9. WASTEWATER TREATMENT SYSTEM INLET
10. WASTEWATER TREATMENT SYSTEM
    - A. ORGANIC SKIMMERS AND SETTLING BASINS
    - B. OXIDATION BASIN NO. 1 (NONAERATED)
    - C. OXIDATION BASIN NO. 2 (AERATED)
    - D. OXIDATION BASIN NO. 3 (AERATED)
    - E. OXIDATION BASIN NO. 4 (AERATED)
    - F. OXIDATION BASIN NO. 5 (AERATED)
    - G. OXIDATION BASIN NO. 6 (AERATED)
    - H. OXIDATION BASIN NO. 7 (NONAERATED)
    - I. OXIDATION BASIN NO. 8 (AERATED)
    - J. TALLEY 2 (NONAERATED)
    - K. TALLEY 3 (NONAERATED)
    - L. D1 BASIN (NONAERATED)
11. D1 BASIN DISCHARGE LINE
12. OXIDATION BASIN NO. 7 DISCHARGE LINE
13. COOLING TOWER BLOWDOWN CHROMIUM REMOVAL
14. COOLING TOWER BLOWDOWN CHROMIUM SETTLING
15. OUTFALL NO. 001
16. OUTFALL NO. 201
17. OUTFALL NO. 202
18. OUTFALL NO. 002
19. OUTFALL NO. 003
20. TALLEY 1A (INACTIVE)
21. TALLEY 1B (INACTIVE-EMPTY)
22. TALLEY 1A DISCHARGE LINE
23. HEAVY ORGANIC BASIN
24. HEAVY ORGANIC BASIN WATER REMOVAL LINE
25. SANITARY LANDFILL (INACTIVE)
26. SANITARY LANDFILL (ACTIVE)
27. SPECIAL WASTE LANDFILL
28. LANDFILL LEACHATE REMOVAL LINE
29. FLY ASH POND
30. BOTTOM ASH POND
31. SPECIAL WASTE STORAGE AREA
32. BY-PRODUCT BOILER FUEL STORAGE
33. CALCIUM CARBONATE BASIN (INACTIVE-EMPTY)
34. PRIMARY SABINE RIVER DIVERSION
35. SECONDARY SABINE RIVER DIVERSION



TEXAS DEPARTMENT OF WATER RESOURCES

RECEIVED
MAR 26 1982
DEPT. OF
WATER RESOURCES
DISTRICT 5

CONFERENCE RECORD

Project: Texas Eastman - #00471

Conference date: March 4, 1982 Place: SFA - 515

Type of conference: Technical
(telephone, staff, formal or informal hearing, other)

Attendance:

Name	Agency
Bob Dicks	TDWR
Greg Tipple	TDWR
Susan White	TDWR
Bob Morris	TDWR
Ann McGinley	TDWR
Tom McAninch	Texas Eastman
Gene Dworsky	Texas Eastman
Dael Baughman	Texas Eastman
Bob Kent	URM, Inc.

Summary:

A meeting was requested by Texas Eastman to discuss the recently completed Phase II Report on ground water well monitoring as required in Permit 00471. (Note: Phase I dealing with surface drainage, regional and local geology and recommendations for Phase II was submitted in January 1981). Phase II presents an evaluation of seepage from all pits and ponds used for waste treatment storage, groundwater analysis, and a proposal for a groundwater program including:

a. proposed locations of monitor wells.

b. construction details of monitor wells.

c. sampling frequency.

d. parameters to be monitored.

e. timetable for implementing the program.

One item - soils boring/coring results - was not included in Phase II as requested. Dael Baughman explained that this information will be submitted by East Texas Testing Association soon after the meeting.

Prepared by: Ann N. McGinley

TDWR-0103

Texas Eastman has about 500 acres of wastewater treatment ponds. There are 8 lagoons and 3 Talley ponds. URM has supervised the drilling of 30 soil borings, 26 of which were converted to ground water monitoring wells. The shallow aquifer under the plant site has been impacted by Texas Eastman waste facilities. The deeper aquifer shows no effect. On the west side of the plant, the head on the shallow aquifer is higher than on the lower so contamination of the lower aquifer is possible. There is seepage along the lagoons, 10,000 gpd, to the Sabine River. Texas Eastman has contracted the Academy of Natural Sciences for a study on the river to determine contamination plume effect on algae, invertibrates, insects and fish. Test points are above Longview, between Longview and 001, and between 002 and 003.

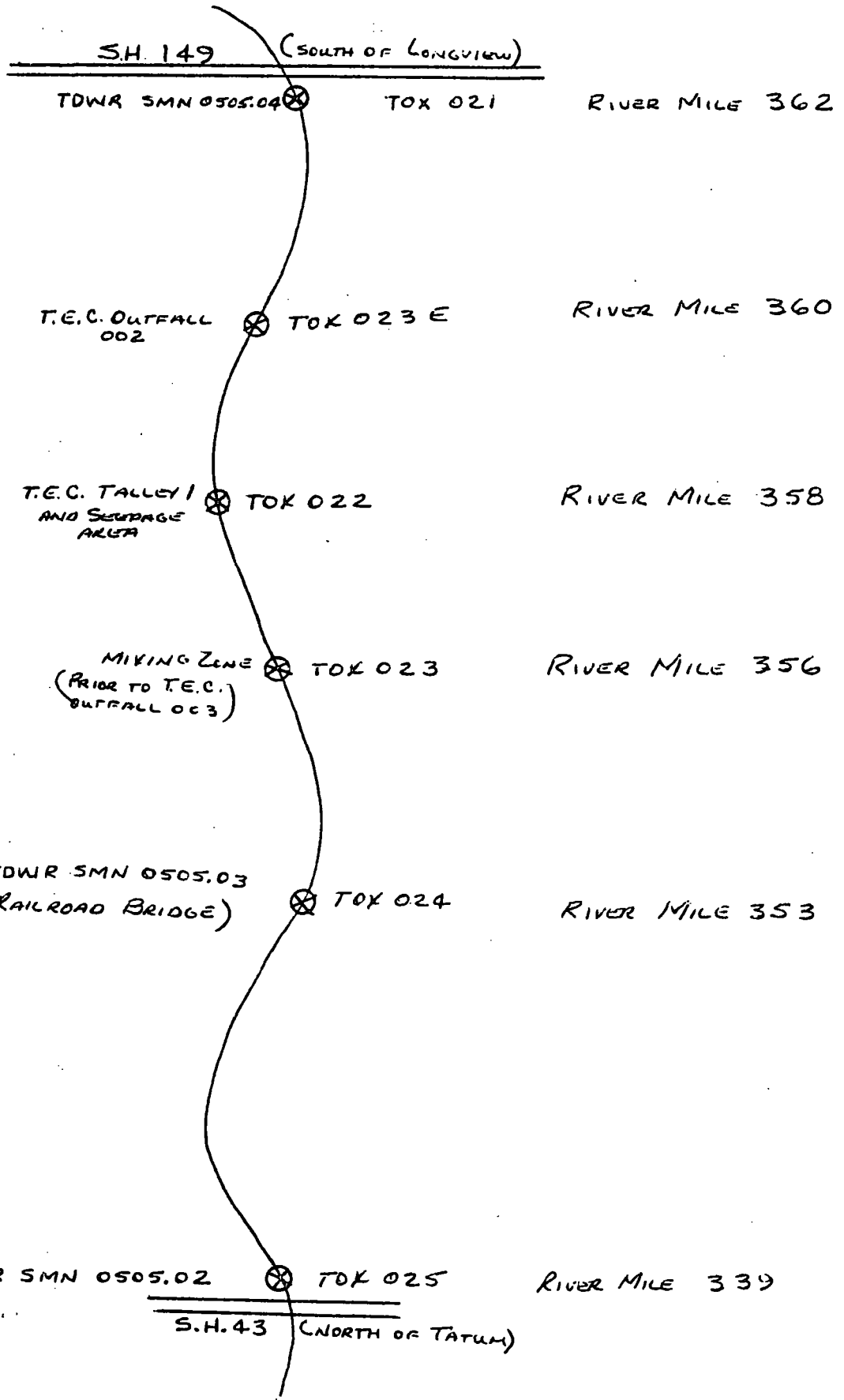
Talley 1 was used for water soluble organic waste. It had seepage problems and Texas Eastman built a slurry wall around 3/4 of it. No waste has been placed here since October 1980. Part A still has wastewater in it which is being directed to treatment system. Part B is maintained dry and is revegetating. Rainfall runoff from Part B meets drinking water standards and TOC is less than 20 ppm according to Texas Eastman.

The HOB facility is used for water insoluble hydrocarbons. Texas Eastman is actively designing an incinerator to be on-line by 1984. They want to incinerate all hazardous wastes.

Texas Eastman is working to improve their acetaldehyde process to reduce the amount of waste generated and to include an end-of-the-line complete destruction unit for the waste.

The company expects to clean out Talley 1A in 1982. They will present a plan for alternate use of this facility.

Texas Eastman will continue the ground water monitoring program. They feel that the program satisfies the RCRA requirements and would like to use this for all their required ground water monitoring. The company purchased a GC-MS and will begin an in-depth analytical program soon to identify the TOC components.


S.H. 149
(SOUTH OF LONGVIEW)
TDWR SMN 0505.04
TOX 021
RIVER MILE 362
T.E.C. OUTFALL 002
TOX 023 E
RIVER MILE 360
T.E.C. TALLEY I AND SEEPAGE AREA
TOX 022
RIVER MILE 358
MIXING ZONE (PRIOR TO T.E.C. OUTFALL 003)
TOX 023
RIVER MILE 356
TDWR SMN 0505.03 (RAILROAD BRIDGE)
TOX 024
RIVER MILE 353
TDWR SMN 0505.02
TOX 025
RIVER MILE 339
S.H. 43 (NORTH OF TATUM)

October 19, 1982

Mr. Allen Messenger, Head
Disposal Facilities Unit
Texas Department of Water Resources
P.O. Box 13087, Capital Station
Austin, Texas 78711

Dear Mr. Messenger:

My letter to you of July 27, 1982, provided notification and details of our plan to close Talley 1B. We appreciate the time and effort Ms. Jenny Stadler and others of your staff gave this matter. It is our understanding that TDWR would prefer that a trench in the south dike not be cut at this time.

In view of comments from TDWR, we have reevaluated our plans for Talley 1B and, for the present, wish to withdraw our request for TDWR approval of our closure plan contained in my July 27 letter. Our original purpose for desiring to cut the trench was to prevent the accumulation of excess rainwater. Since tests run on the water show it essentially equivalent to that in the river and you have no objections to the accumulation, we are content to leave the dike intact. We have continuing studies underway in the area and will make you aware of any significant findings, if any.

If you have any questions please call Ms. Stancy Simpson at (214) 236-5000, Extension 3168.

Very truly yours,

Dael Baughman, Coordinator
Clean Environment Program

mm

cc: Mr. Bob Dicks, Head
Industrial Wastewater Unit
Texas Department of Water Resources
P.O. Box 13087, Capital Station
Austin, Texas 78711

Texas Department of Water Resources
District 5
2807 Highway 42 North
Kilgore, Texas 75662

EPA Study

TEXAS EASTMAN COMPANY SURVEY

November 27, 1979

As part of our Regional commitment to collect and analyze ambient water, sediment, and fish for the 129 priority pollutants, the Texas Department of Water Resources collected samples from four sites on the Sabine River in Harrison County as well as two effluent samples. These samples were shipped to the Region 6 Laboratory in Houston for analysis.

The site locations were selected to provide input into Headquarters (MDSD) "fate studies". These studies are aimed at predicting the fate of toxic pollutants from point sources in the aquatic environment. The major industrial discharge to the Sabine River is the Texas Eastman Company (NPDES application #TX0000949) near Longview, Texas. The primary SIC number is 2869, Industrial Organic Chemicals. The permit has the following effluent limitations at outfalls 002 and 003:

	Daily Max
TSS	84700 lbs/day
BOD_5	17500 lbs/day
Total chromium	76 lbs/day
pH	6.0 - 9.0 S.U.

Samples were collected by Chip Volz, John Witherspoon, and Joe D. Woodward of the Texas Department of Water Resources (TDWR) on November 1979. Fish tissue samples were not collected for this study. Grab samples for station TOX023E were composited according to flow from two discharge pipes, Lagoon 8 (approximately 60%), and Cooling Tower Blowdown Water (40%). This was done for all samples except VOA and fecal coliform, which were collected in the receiving stream below the two discharge sources. TOX022 water samples were collected from Talley 1 evaporation basin (see attached map). Seepage from Talley 1 was not visible due to high river flows. Sediment samples were collected from the Sabine River adjacent to the talley 1 dike.

Field data and priority pollutant analysis for organics and heavy metals are included in this report. Extremely high levels of chloroform (3750 ug/l in Water, 4400 ug/l in Sediment) were detected in the water and sediment samples from TOX022, the seepage area. Levels of chloroform at stations upstream and downstream from TOX022 were low or undetected (<20 ug/l). Recoverable phenolics were also highest in the seepage area water samples at 52 ug/l. Bis(2-ethylhexyl) phthalate was detected at all water and sediment stations sampled. Sediment levels of this compound increased at each sucessive downstream station.

At one or both stations below the mixing zone (TOX023), nickel, chromium, zinc, and mercury (in trace amounts) were detected in water samples. Chromium, lead, nickel, and zinc were found in sediment samples at one or more of these stations in the part per million range. Other heavy metals detected at or above, but not below TOX022 included antimony, cadmium, copper, silver, and thallium. Five organics (anthracene, chrysene, flouranthene, phenanthrene, and pyrene) were found at detectable limits in sediment at only the first downstream station (TOX024). A possible source for these organics could be surrounding runoff. An open ditch for Lake Overflow is located on TEC property upstream from TOX024. Cyanide was detected in the effluent and the 2nd downstream sediment samples only.

The Sabine River, in Longview, Texas, has been selected for an intensive toxics survey in FY-81, to be performed by TDWR. The purpose of the survey is to establish a data base for the 129 priority pollutants in order develop applicable criteria for the waters of the State. The survey is funded under Section 106 of the Clean Water Act. This uncoming survey should also be used to confirm the findings from the FY-80 samples.

Station Descriptions
(A = 11POX06)

STORET number	Description
TOX021 0505.0400	Sabine River at SH 149 south of Longview, upstream of Texas Eastman discharge.
TOX023 E	Texas Eastman - Longview discharge (NPDES #TX0000949)
TOX022	Sabine River, 2 river miles below Texas Eastman discharge, in seepage area.
TOX023	Sabine River in maxing zone, 4 river miles below Texas Eastman discharge.
TOX024 05050300	Sabine River 7 river miles below Texas Eastman discharge.
TOX025 0505.0200	Sabine River 21 river miles below Texas Eastman discharge.

Organic Priority Pollutants Identified in Texas-Eastman Survey
Survey Data - November 27, 1979

TOX021	Water	Sediment
phenolics recoverable	4 ug/l	UD
* bio(2-ethylhexyl)phthalate	10K ug/l	3800 ug/kg (possible lab contamination)
copper	66 ug/l	UD
chromium	UD	4.39 mg/kg
lead	UD	2.32 mg/kg
mercury	0.2K ug/l	UD
nickel	29 ug/l	4.64 mg/kg
zinc	20 ug/l	15.40 mg/kg

* values reflect possible lab contamination

TOX023E	Water	Sediment
		Not sampled
phenolics recoverable	10 ug/l	
cyanide	5 mg/l	
chloroform	65 ug/l	
bis(2-ethyhexyl)phthalate	210 ug/l	
antimony	76 ug/l	
chromium	70 ug/l	
copper	39 ug/l	
lead	30 ug/l	
mercury	0.42 ug/l	
nickel	84 ug/l	
thallium	58 ug/l	
zinc	122 ug/l	

TOX022	Water	Sediment
phenolics recoverable	52 ug/l	UD
chloroform	3750 ug/l	4400 ug/kg
Bio(2-ethylhexyl)phthalate	10 ug/l	580 ug/kg
antimony	43 ug/l	UD
arsenic	UD	2.31 mg/kg
cadmium	61 ug/l	UD
Chromium	68.5 ug/l	6.03 mg/kg
lead	340 ug/l	3.62 mg/kg
mercury	0.34 ug/l	0.11 mg/kg
nickel	1,358 ug/l	7.04 mg/kg
silver	22 ug/l	UD
thallium	580 ug/l	UD
zinc	2540 ug/l	20.51 mg/kg

TOX023	Water	Sediment
phenolics recoverable	3 ug/l	UD
chloroform	20 ug/l	UD
bis(2-ethylhexyl)phthalate	10.0K ug/l	850 ug/kg
arsenic	UD	2.01 mg/kg
chromium	UD	6.03 mg/kg
copper	UD	2.01 mg/kg
lead	20.8 ug/l	4.10 mg/kg
mercury	0.2K ug/l	UD
nichel	32 ug/l	6.23 mg/kg
zinc	28 ug/l	22.31 mg/kg

TOX024	Water	Sediment
phenolics recoverable	2 ug/l	UD
chloroform	20K ug/l	UD
anthracene	UD	500K ug/kg
chrysene	UD	500K ug/kg
flouranthene	UD	500K ug/kg
phenanthrene	UD	500K ug/kg
pyrene	UD	500K ug/kg
bis(2 ethylhexyl)phthalate	20 ug/l	730 ug/kg
lead	UD	5.6 mg/l
mercury	0.2K ug/l	UD
nickel	22 ug/l	7.70 mg/kg
zinc	21 ug/l	25.1 mg/kg

TOX025	Water	Sediment
chloroform	20K ug/l	UD
cyanide	UD	0.156 mg/kg
bis(2-ethylhexyl) phthalate	15 ug/l	22.30 ug/kg
chromium	19.75 ug/l	6.0 mg/kg
lead	UD	13.78 mg/kg
mercury	0.2 ug/l	UD
nickel	24 ug/l	7.44 mg/kg
zinc	32 ug/l	27.86 mg/kg

UD = undetected

FIELD AND BACTERIA DATA

	TOX021	TOX023E	TOX022	TOX023	TOX024	TOX025
Flow (CFS)	719	2.13	-	735	750	960
Temp (°C)	22.2	20	15.5	12.5	16.1	13.9
pH (s u)	6.9	6.4	7.0	6.7	6.7	6.3
D.O. (mg/l)	9.6	9.4	-	9.0	9.2	9.1
Turb (JTU)	29	30	>500	45	70	40
Fecal Col. (#/100 ml)	90	50	<10	90	70	140

CONVENTIONAL POLLUTANTS DATA

Conventional Pollutants(mg/l)	TOX021	TOX023E	TOX022	TOX023	TOX024		TOX025
BOD_5	4	38	<764	4	4	5	
COD	20	182	26250	34	48	25	
TOC	6	62	8400	7	0.0U		9
TSS	28	16	373	31	23	47	
Chlorophyll-a	0.004	0.002	0.0U	0.004	0.014		0.011
Hardness	46	228	700	48	48	40	

Priority Pollutants in Sediment from Sabine River
Texas: Survey Date - November 27, 1979
(Organics in Sediment - ug/kg; Heavy metals - mg/kg)

Pollutant	Upstream TOX021	Discharge TOX023E	Seepage TOX022	Mixingzone TOX023	1st downstream TOX024	2nd downstream TOX025
- cyanide (mg/l)	ND	N	ND	ND	ND	0.156
- chloroform(ug/kg)	ND	O	4400	ND	ND	ND
- bis(2 ethylhexyl) phthalate (ug/kg)	*3800	T	580	850	730	2230
Arsenic (mg/kg)	ND	S	2.31	2.01	ND	ND
- chromium	4.39	A	6.03	6.04	ND	6.0
- copper	ND	M	2.31	2.01	ND	ND
- lead	2.32	P	3.62	4.10	5.60	13.78
- mercury	ND	L	0.11	ND	ND	ND
- nickel	4.64	E	7.04	6.23	7.70	7.44
- zinc	15.40	D	20.51	22.31	25.1	27.86
- Anthracene (ug/kg)	ND		ND	ND	<500	ND
- chrysene	ND		ND	ND	<500	ND
- flouranthene	ND		ND	ND	<500	ND
- phenanthrene	ND		ND	ND	<500	ND
- pyrene	ND		ND	ND	<500	ND

ND = Not detected

* Note = value reflects possible lab contamination.

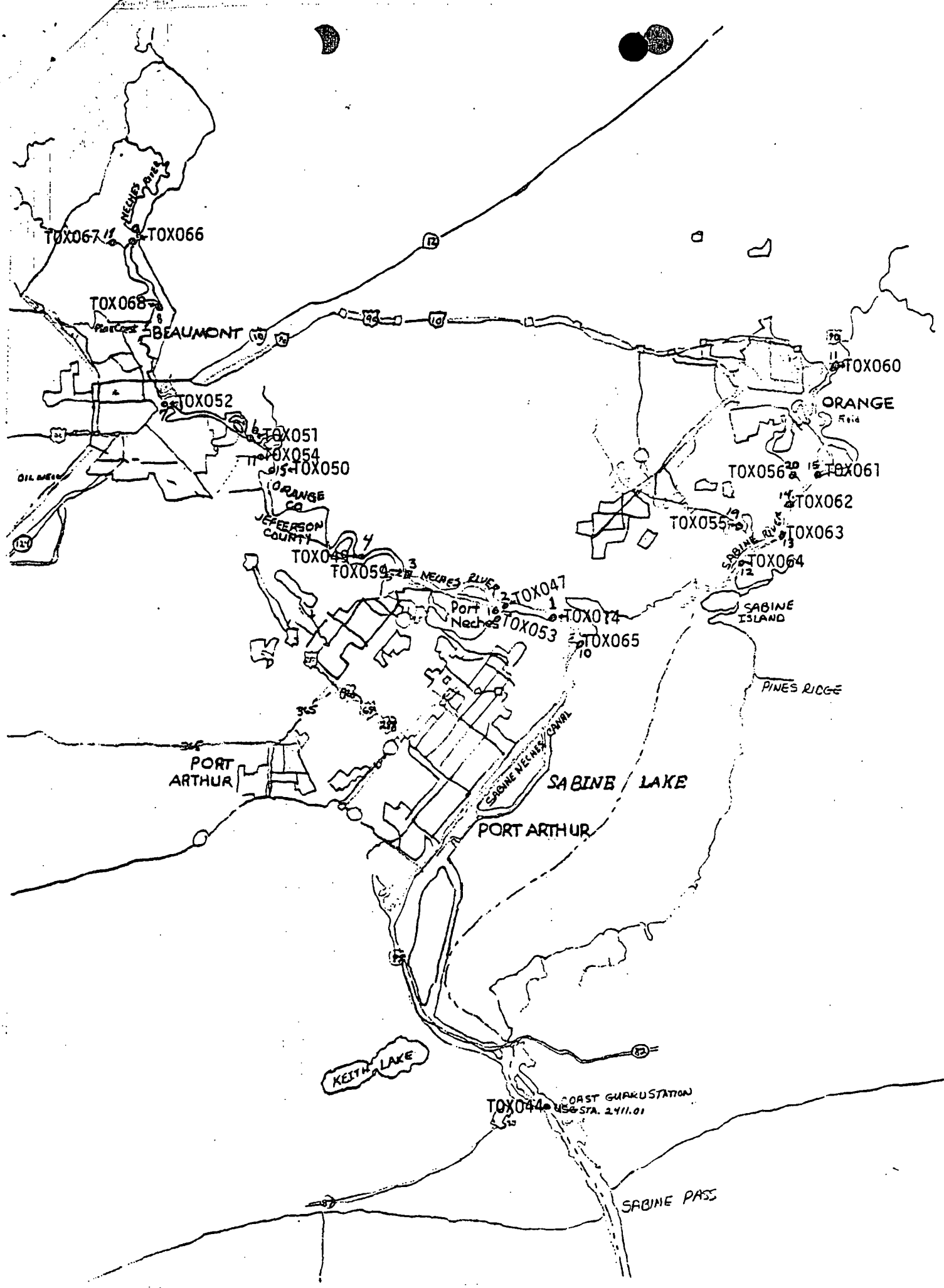
Priority Pollutants in Water from Sabine River
Texas: Survey Date - November 27, 1979
(Total in H_2O - ug/l)

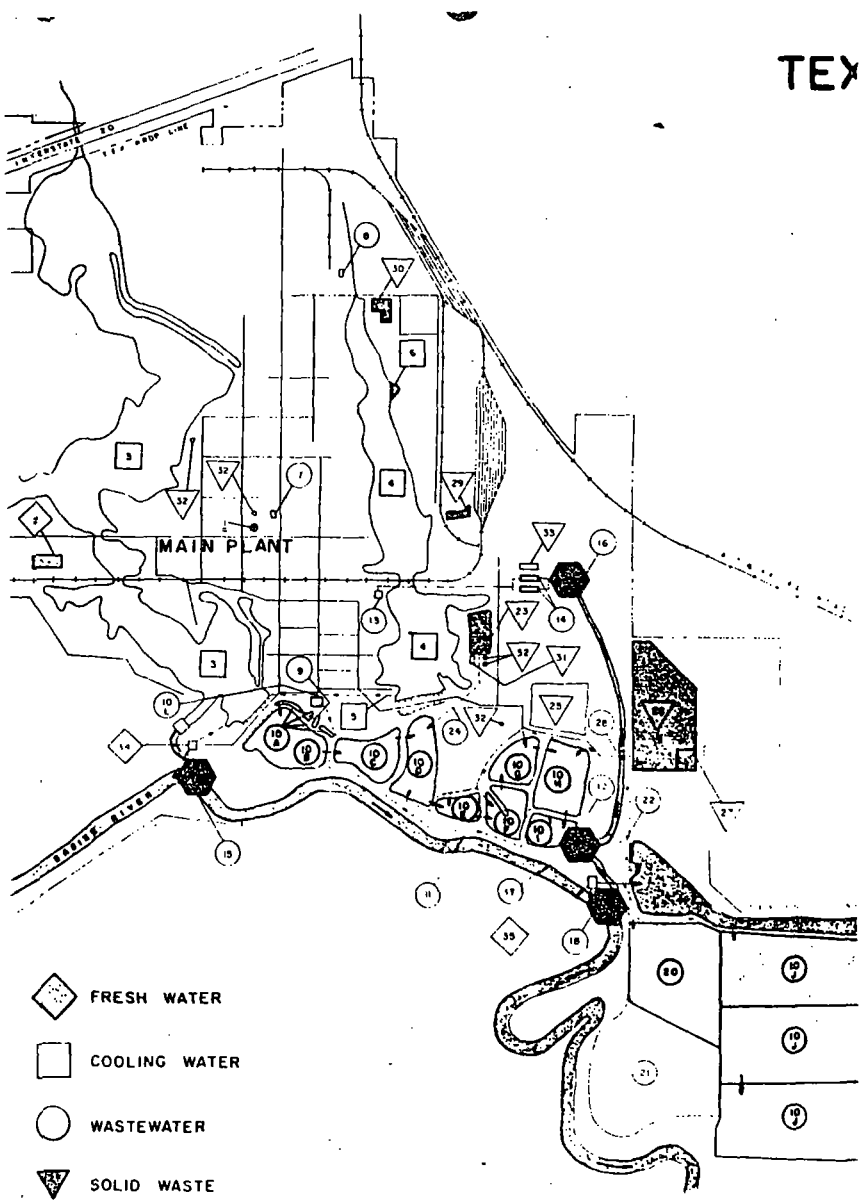
Chemical	Upstream TOX021	Discharge TOX023E	Seepage TOX022	Miningzone TOX023	1st downstream TOX024	2nd downstream TOX025
- phenolics recoverable	4	10	52	3	2	ND
- cyanide	ND	5000	ND	ND	ND	ND
- chloroform	ND	65	3750	30	<20	<20
- bis(2-ethylhexyl) phthalate	<10	210	10	<10	20	15
- antimony	ND	76	43	ND	ND	ND
- cadmium	ND	ND	61	ND	ND	ND
- chromium	ND	70	68.5	ND	ND	19.75
- copper	66	39	6758	ND	ND	ND
- lead	ND	30	340	20.8	ND	ND
- mercury	<0.2	0.42	0.34	<0.2	<0.2	0.2
- silver	ND	ND	22	ND	ND	ND
- thallium	ND	58	580	ND	ND	ND

Texas: Survey Date - November 27, 1980

- zinc	20	122	2540	28	21	31

ND = Not detected
*Note - value reflects possible lab contamination.

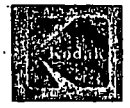

TOX067
TOX066
TOX068
BEAUMONT
TOX052
TOX051
TOX054
TOX050
ORANGE CO
JEFFERSON COUNTY
TOX049
TOX059
NECHES RIVER
TOX047
TOX074
Port Neches
TOX053
TOX065
TOX060
ORANGE
TOX056
TOX061
TOX062
TOX055
TOX063
SABINE RIVER
TOX064
SABINE ISLAND
PINES RIDGE
PORT ARTHUR
SABINE NECHES CANAL
SABINE LAKE
PORT ARTHUR
KEITH LAKE
TOX044
COAST GUARD STATION
USCG STA. 24111.01
SABINE PASS



WASTE TREATMENT FACILITIES SK

-LEGEND-

1. PLANT CENTER (LATITUDE 32°-26'-17", LONGITUDE 94°-41'-24")
2. CHEROKEE WATER RESERVOIR
3. COOLING WATER RESERVOIR NO. 1
4. COOLING WATER RESERVOIR NO.2
5. COOLING WATER RESERVOIR NO.2 OVERFLOW LINE
6. COAL PILE RUNOFF POND
7. CATALYST TREATMENT BASIN NO. 1
8. CATALYST TREATMENT BASIN NO.2
9. WASTEWATER TREATMENT SYSTEM INLET
10. WASTEWATER TREATMENT SYSTEM
    - A. ORGANIC SKIMMERS AND SETTLING BASINS
    - B. OXIDATION BASIN NO. 1 (NONAERATED)
    - C. OXIDATION BASIN NO. 2 (AERATED)
    - D. OXIDATION BASIN NO. 3 (AERATED)
    - E. OXIDATION BASIN NO. 4 (AERATED)
    - F. OXIDATION BASIN NO. 5 (AERATED)
    - G. OXIDATION BASIN NO 6 (AERATED)
    - H. OXIDATION BASIN NO. 7 (NONAERATED)
    - I. OXIDATION BASIN NO. 8 (NONAERATED)
    - J. TALLEY 2 (NONAERATED)
    - K. TALLEY 3 (NONAERATED)
    - L. DI BASIN (NONAERATED)
11. DI BASIN DISCHARGE LINE
12. OXIDATION BASIN NO. 7 DISCHARGE LINE
13. COOLING TOWER BLOWDOWN CHROMIUM REMOVAL
14. COOLING TOWER BLOWDOWN CHROMIUM SETTLING
15. OUTFALL NO. 001
16. OUTFALL NO. 201
17. OUTFALL NO. 202
18. OUTFALL NO. 002
19. OUTFALL NO. 003
20. TALLEY IA (INACTIVE)
21. TALLEY IB (INACTIVE-EMPTY)
22. TALLEY IA DISCHARGE LINE
23. HEAVY ORGANIC BASIN
24. HEAVY ORGANIC BASIN WATER REMOVAL LINE
25. SANITARY LANDFILL (INACTIVE)
26. SANITARY LANDFILL (ACTIVE)
27. SPECIAL WASTE LANDFILL
28. LANDFILL LEACHATE REMOVAL LINE
29. FLY ASH POND
30. BOTTOM ASH POND
31. SPECIAL WASTE STORAGE AREA
32. BY-PRODUCT BOILER FUEL STORAGE
33. CALCIUM CARBONATE BASIN (INACTIVE-EMPTY)
34. PRIMARY SABINE RIVER DIVERSION
35. SECONDARY SABINE RIVER DIVERSION



July 20, 1982

Mr. C. R. Miertschin, Director
Enforcement and Field Operations
Texas Department of Water Resources
P.O. Box 13087, Capitol Station
Austin, Texas 78711

Dear Mr. Miertschin:

Re: TDWR Wastewater Permit No. 00471

On March 4, 1982, Texas Eastman Company presented the report required under the referenced wastewater permit, "Hydrogeologic Study of the Texas Eastman Company - Phase II" to staff members of TDWR. This report involved investigations made around all pits and ponds both hazardous and nonhazardous. The data contained in the report was considered to be preliminary with additional monitoring to follow as proposed in the report, although there was evidence of contamination in some wells. We appreciate the attention given to our report and presentation by TDWR personnel. The review of our plans, and the comments received, have been helpful to us in planning and executing our groundwater program. As discussed with your people, our program includes the elimination of the Heavy Organic Basin and basin T-1A as possible sources of groundwater contamination by emptying them, and careful monitoring of other wastewater treatment facilities. We plan to incinerate the contents of the Heavy Organic Basin in a hazardous waste incinerator to be constructed on our site.

Our groundwater monitoring program is being implemented to comply with both provision III-H of our Wastewater Permit No. 00471, and the appropriate RCRA program specified in Texas Administrative Code, Sections 335.191-335.195. Our March 4 presentation was made in accordance with our wastewater permit, and to brief TDWR personnel on our groundwater plans. It was not our intent that the report or representations made at the meeting serve as notice of significant contamination, or of our intent to implement an Alternate Groundwater Water Quality Assessment Plan under the RCRA program as allowed in TAC 335.191(d). It is our intention to collect a full year of data from those monitoring wells involved with the RCRA program as specified in TAC 335.193(c).

We have efforts underway to quantify data showing the concentration of hazardous waste or hazardous constituents from wells, TEX-5-S, TEX-9-S, and TEX-19-S that you requested in your June 3, 1982 letter. While our interpretation is that this information is not yet required by TAC 335.195 (a)(2)(B), we are doing the analytical determinations required and will voluntarily submit the results as soon as they are available. We have had problems due to lack of experience with our new gas chromotograph/ mass spectrometer/data system and because several mechanical and electrical problems have occurred with this new equipment. We are making progress, but we will not be able to meet the August 3 requested date. Accordingly, we request a sixty day extension to complete the task.

Well TEX-6-S is located adjacent to basin T-1A, which has been inactive since before November 19, 1980 and now is empty. Well TEX-6-S is not intended to monitor any RCRA facilities and is not covered by TAC 335.191. However, at your request we will also collect data on the concentration of the same hazardous waste or hazardous constituents in a sample from this well as we are doing for the wells covered by TAC 335.191. We plan to submit this data along with the data from Wells TEX-5-S, TEX-9-S, and TEX-19-S, and also request a sixty day extension for this report.

We have been collecting and reporting the groundwater data quarterly from the RCRA wells in the format your agency has requested, including the voluntary submittal of the groundwater quality and indicator parameter. When we have collected a full year of data we intend to apply the Student's t-test as required by TAC 335.194(b).

It is our understanding that frequency of monitoring after the first year would be determined after the Student's t-test was completed based on the full year's data. We realized that the frequency of monitoring as contained in the Phase II report was subject to change at that time. Again I would like to point out the Phase II report was submitted to fulfill the referenced TDWR Wastewater Discharge Permit requirement, not the hazardous waste facility requirements contained in TAC 335.191-335.195.

Thank you for pointing out that turbidity is not a required groundwater parameter and that total chromium is to be used in the groundwater suitability test. These were oversights in the Phase II report.

We will continue to expedite our program to develop the analytical data on the subject wells as soon as possible and will appreciate your favorable consideration of our extension request. If you have any questions or need additional information, please call Dr. Tom McAninch at 214/236-5000, extension 3116.

Very truly yours,

Dael Baughman

Dael Baughman, Coordinator
Clean Environment Program

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cc: Ms. Ann McGinley
Enforcement and Field Operations
Texas Department of Water Resources
P.O. Box 13087, Capitol Station
Austin, Texas 78711

Texas Department of Water Resources
District 5
2807 Highway 42 North
Kilgore, Texas 75662

July 6, 1984

Bill Boggs, Supervisor
Texas Department of Water Resources
2807 Highway 42 North
Kilgore, Texas 75662

Dear Mr. Boggs:

Re: Solid Waste Registration Number 30137 TXD007330202

Pursuant to Mr. Snow's letter dated June 22, 1984, Texas Eastman Company is notifying your office that we plan to begin closure on Fly Ash Pond No. 2 no earlier than the week of July 16. The exact date for beginning closure activities is dependent on weather and contractor availability. We will call Mr. Davis of your staff as soon as a firm starting date is available.

If you have any questions, please contact Ms. Stancy Simpson at (214) 236-5000, Extension 3168.

Very truly yours,

Dael Baughman

Dael Baughman, P.E.
Engineering Associate
Clean Environment Program

lbg